

STREET: Two Embarcadero Center,, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/758,417A
FILING DATE: 02-Dec-1996
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/728,463
FILING DATE: 10-OCT-1996
APPLICATION NUMBER: US 08/544,404
FILING DATE: 10-OCT-1995
APPLICATION NUMBER: US 08/352,322
FILING DATE: 07-DEC-1994
APPLICATION NUMBER: US 08/209,741
FILING DATE: 09-MAR-1994
APPLICATION NUMBER: US 08/165,699
FILING DATE: 10-DEC-1993
APPLICATION NUMBER: US 08/161,739
FILING DATE: 03-DEC-1993
APPLICATION NUMBER: US 08/155,301
FILING DATE: 18-NOV-1993
APPLICATION NUMBER: US 08/096,762
FILING DATE: 22-JUL-1993
APPLICATION NUMBER: US 08/053,131
FILING DATE: 26-APR-1993
APPLICATION NUMBER: US 07/990,860
FILING DATE: 16-DEC-1992

ATTORNEY/AGENT INFORMATION:

NAME: Serafini, Andrew T.
REGISTRATION NUMBER: 41,303
REFERENCE/DOCKET NUMBER: 014543-009030US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 208:

SEQUENCE CHARACTERISTICS:

LENGTH: 439 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: DNA

SEQUENCE DESCRIPTION: SEQ ID NO: 208:

US-08-758-417A-208

Query Match 100.0%; Score 439; DB 3; Length 439;
Best Local Similarity 100.0%; Pred. No. 1.1e-133;
Matches 439; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60

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Db      1  |||||ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
Qy      61  AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
Db      61  |||||AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
Qy      121  GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
Db      121  |||||GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
Qy      181  AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
Db      181  |||||AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
Qy      241  CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
Db      241  |||||CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
Qy      301  CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
Db      301  |||||CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
Qy      361  GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
Db      361  |||||GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
Qy      421  CCGCCATCTGATGAAGCTT 439
Db      421  |||||CCGCCATCTGATGAAGCTT 439

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RESULT 3

US-09-042-353-393

; Sequence 393, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/810,279
; FILING DATE: 17-DEC-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/853,408
; FILING DATE: 18-MAR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/904,068
; FILING DATE: 23-JUN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 393:

; SEQUENCE CHARACTERISTICS:
; LENGTH: 3819 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-393

Query Match 86.1%; Score 377.8; DB 3; Length 3819;
Best Local Similarity 92.5%; Pred. No. 3e-113;
Matches 397; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

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Qy      6 CATGGAGTTCCCCGTTCTAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 65
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Db    2445 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCAGGTGCCAGATG 2504

Qy     66 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125
      |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2505 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCAC 2564

Qy    126 CATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
      |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2565 CATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAACC 2624

Qy    186 AGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245
      || |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2625 AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGTGTCCCATC 2684

Qy    246 AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
      |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2685 AAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 2744

Qy    306 TGAAGATTTTGCAACTTATTACTGCCAACAGTATCATAGTTACCCGTACACTTTTGGCCA 365
      |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2745 TGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTTGGTCA 2804

Qy    366 GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 425
      ||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2805 GGGAAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 2864

Qy    426 ATCTGATGA 434
      |||| ||||
Db    2865 ATCTGATGA 2873
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RESULT 4

US-08-758-417A-243

; Sequence 243, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/758,417A
FILING DATE: 02-Dec-1996
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/728,463
FILING DATE: 10-OCT-1996
APPLICATION NUMBER: US 08/544,404
FILING DATE: 10-OCT-1995
APPLICATION NUMBER: US 08/352,322
FILING DATE: 07-DEC-1994
APPLICATION NUMBER: US 08/209,741
FILING DATE: 09-MAR-1994
APPLICATION NUMBER: US 08/165,699
FILING DATE: 10-DEC-1993
APPLICATION NUMBER: US 08/161,739
FILING DATE: 03-DEC-1993
APPLICATION NUMBER: US 08/155,301
FILING DATE: 18-NOV-1993
APPLICATION NUMBER: US 08/096,762
FILING DATE: 22-JUL-1993
APPLICATION NUMBER: US 08/053,131
FILING DATE: 26-APR-1993
APPLICATION NUMBER: US 07/990,860
FILING DATE: 16-DEC-1992

ATTORNEY/AGENT INFORMATION:

NAME: Serafini, Andrew T.
REGISTRATION NUMBER: 41,303
REFERENCE/DOCKET NUMBER: 014643-009030US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 243:

SEQUENCE CHARACTERISTICS:

LENGTH: 3819 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: DNA

SEQUENCE DESCRIPTION: SEQ ID NO: 243:

US-08-758-417A-243

Query Match 86.1%; Score 377.8; DB 3; Length 3819;
Best Local Similarity 92.5%; Pred. No. 3e-113;
Matches 397; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 6 CATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 65

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      |||| | |||| | ||||||| || ||||||| ||||||| ||||||| |||||||
Db      2445 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCAGGTTCCAGATG 2504

Qy      66 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125
      ||||||| ||||||| ||||||| || || ||||||| ||||||| ||||||| |||||||
Db      2505 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCAC 2564

Qy      126 CATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
      ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db      2565 CATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAACC 2624

Qy      186 AGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245
      || ||||| ||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db      2625 AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGTGTCCCATC 2684

Qy      246 AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
      ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db      2685 AAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 2744

Qy      306 TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA 365
      ||||||| ||||||| || || ||||| | |||||| ||||||| ||||||| ||
Db      2745 TGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTTGGTCA 2804

Qy      366 GGGGACCAAGCTGGAGATCAAACGAACGTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 425
      ||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db      2805 GGGAACCAAGCTGGAGATCAAACGAACGTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 2864

Qy      426 ATCTGATGA 434
      |||||||
Db      2865 ATCTGATGA 2873

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RESULT 5

US-09-472-087-62

; Sequence 62, Application US/09472087

; Patent No. 6682736

; GENERAL INFORMATION:

; APPLICANT: HANSON, DOUGLAS C.

; APPLICANT: NEVEU, MARK J.

; APPLICANT: MUELLER, EILLEN E.

; APPLICANT: HANKE, JEFFREY H.

; APPLICANT: GILMAN, STEVEN C.

; APPLICANT: DAVIS, C. GEOFFREY

; APPLICANT: CORVALAN, JOSE R.

; TITLE OF INVENTION: HUMAN MONOCLONAL ANTIBODIES TO CTLA-4

; FILE REFERENCE: ABX-PF1

; CURRENT APPLICATION NUMBER: US/09/472,087

; CURRENT FILING DATE: 1999-12-23

; PRIOR APPLICATION NUMBER: 60/113,647

; PRIOR FILING DATE: 1998-12-23

; NUMBER OF SEQ ID NOS: 147

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 62

; LENGTH: 714

; TYPE: DNA

; ORGANISM: Homo sapiens

US-09-472-087-62

Db 393 GGCGGAGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 452
Qy 421 CCGCCATCTGATGA 434
|||||||
Db 453 CCGCCATCTGATGA 466

RESULT 7

US-09-042-353-420

; Sequence 420, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/810,279

; FILING DATE: 17-DEC-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/853,408

; FILING DATE: 18-MAR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/904,068

; FILING DATE: 23-JUN-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 420:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 420 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-420

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Query Match          81.5%; Score 357.8; DB 3; Length 420;
Best Local Similarity 92.2%; Pred. No. 3.8e-107;
Matches 377; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

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Qy      6 CATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 65
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Db     12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCAGGTTCCAGATG 71

Qy     66 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCAC 131

Qy    126 CATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    132 CATCACTTGTCGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC 191

Qy    186 AGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245

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Db      192 AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGTGTCCCATC 251
Qy      246 AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
Db      252 AAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 311
Qy      306 TGAAGATTTTGCACCTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA 365
Db      312 TGAAGATTTTGCACCTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTTGGTCA 371
Qy      366 GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 414
Db      372 GGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 420

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RESULT 8

US-08-758-417A-220

; Sequence 220, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

; APPLICATION NUMBER: US 08/352,322

; FILING DATE: 07-DEC-1994

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

; APPLICATION NUMBER: US 08/165,699

; FILING DATE: 10-DEC-1993

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

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; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Serafini, Andrew T.
; REGISTRATION NUMBER: 41,303
; REFERENCE/DOCKET NUMBER: 014643-009030US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 220:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 420 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 220:
US-08-758-417A-220

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Qy	6	CATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAAGGTGCCAGATG	65
Db	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCAAGGTCCAGATG	71
Qy	66	TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC	125
Db	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCAC	131
Qy	126	CATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC	185
Db	132	CATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC	191
Qy	186	AGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC	245
Db	192	AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGTGTCCCATC	251
Qy	246	AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	305
Db	252	AAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	311
Qy	306	TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA	365
Db	312	TGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTTGGTCA	371
Qy	366	GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC	414
Db	372	GGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC	420

US-09-042-353-358

; Sequence 358, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

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; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/810,279

; FILING DATE: 17-DEC-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/853,408

; FILING DATE: 18-MAR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/904,068

; FILING DATE: 23-JUN-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/165,699

; FILING DATE: 10-DEC-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/352,322

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; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 358:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 388 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-358

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Query Match          80.0%; Score 351.2; DB 3; Length 388;
Best Local Similarity 94.1%; Pred. No. 5.3e-105;
Matches 365; Conservative 0; Mismatches 23; Indels 0; Gaps 0;

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Db      1 ATGGACATGATGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTCCCAGGTTC 60

Qy     61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
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Db     61 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA 120

Qy    121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
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Db    121 GTCACCATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCAT 180

Qy    181 AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
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Db    181 AAACCAGGGAAAGCCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC 240

Qy    241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
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Db    241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300

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Db      301 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTT 360
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RESULT 10

US-08-758-417A-206

; Sequence 206, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

; APPLICATION NUMBER: US 08/352,322

; FILING DATE: 07-DEC-1994

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

; APPLICATION NUMBER: US 08/165,699

; FILING DATE: 10-DEC-1993

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; ATTORNEY/AGENT INFORMATION:

; NAME: Serafini, Andrew T.

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;      REGISTRATION NUMBER: 41,303
;      REFERENCE/DOCKET NUMBER: 014643-009030US
;      TELECOMMUNICATION INFORMATION:
;      TELEPHONE: (415) 576-0200
;      TELEFAX: (415) 576-0300
;      INFORMATION FOR SEQ ID NO: 206:
;      SEQUENCE CHARACTERISTICS:
;      LENGTH: 388 base pairs
;      TYPE: nucleic acid
;      STRANDEDNESS: single
;      TOPOLOGY: linear
;      MOLECULE TYPE: DNA
;      SEQUENCE DESCRIPTION: SEQ ID NO: 206:
US-08-758-417A-206

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Query Match 80.0%; Score 351.2; DB 3; Length 388;
Best Local Similarity 94.1%; Pred. No. 5.3e-105;
Matches 365; Conservative 0; Mismatches 23; Indels 0; Gaps 0;

Qy	1	ATGGACATGGAGTTCCCGGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTCCTCCAGGTGCC	60
Db	1	ATGGACATGATGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTCC	60
Qy	61	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	120
Db	61	AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA	120
Qy	121	GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG	180
Db	121	GTCACCATCACTTGTCGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCAT	180
Qy	181	AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC	240
Db	181	AAACCAGGGAAAGCCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC	240
Qy	241	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
Db	241	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
Qy	301	CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT	360
Db	301	CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTT	360
Qy	361	GGCCAGGGGACCAAGCTGGAGATCAAAC	388
Db	361	GGCCAGGGGACCAAGCTGGAGATCAAAC	388

RESULT 11

US-09-343-485A-3

; Patent No. 6413777

: APPLICANT: REFF, MITCHELL R.

; APPLICANT: BARNETT, RICHARD S.
; APPLICANT: MCLACHLAN, KAREN R.

10 TITLE OF INVENTION: NOVEL METHOD FOR INTEGRATING GENES AT SPECIFIC SITES IN

RESULT 12

US-08-488-376-16

; Sequence 16, Application US/08488376

; Patent No. 5811524

; GENERAL INFORMATION:

; APPLICANT: BRAMS, Peter

; APPLICANT: CHAMAT, Soulaïma Salim

; APPLICANT: PAN, Li-Zhen

; APPLICANT: WALSH, Edward E.

; APPLICANT: HEARD, Cheryl Janne

; APPLICANT: NEWMAN, Roland Anthony

; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN

; TITLE OF INVENTION: MONOCLONAL ANTIBODIES SPECIFIC TO RSV F-PROTEIN AND

; TITLE OF INVENTION: METHODS FOR THEIR MANUFACTURE AND THERAPEUTIC USE

THEREOF

; NUMBER OF SEQUENCES: 19

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Burns, Doane, Swecker & Mathis

; STREET: P.O. Box 1404

; CITY: Alexandria

; STATE: Virginia

; COUNTRY: United States

; ZIP: 22313-1404

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/488,376

; FILING DATE: 07-JUN-1995

; CLASSIFICATION: 424

; ATTORNEY/AGENT INFORMATION:

; NAME: Teskin, Robin L.

; REGISTRATION NUMBER: 35,030

; REFERENCE/DOCKET NUMBER: 012712-150

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (703) 836-6620

; TELEFAX: (703) 836-2021

; INFORMATION FOR SEQ ID NO: 16:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 705 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 1..705

US-08-488-376-16

Query Match 76.0%; Score 333.6; DB 1; Length 705;

Best Local Similarity 86.2%; Pred. No. 3.9e-99;

Matches 369; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

Qy 7 ATGGAGTTCCTCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
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Db 1 ATGGAGACCCCTGCTCAGCTCCTGGGGCTCCTGCTACTCTGGCTCCGAGGTGCCAGATGT 60
 Qy 67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
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 Db 61 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCTGGAGACAGAGTCACC 120
 Qy 127 ATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
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 Db 121 ATCACTTGCCGGGCAGGTGAGAGGATTGCTAGTTATTTAAATTGGTATCAGCACAAACCA 180
 Qy 187 GAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
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 Db 181 GGGAAAGCCCCCTAAGTCCCTGATATATGCTGGATCCAATTTGCACCGTGGGGTCCCGTCA 240
 Qy 247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306
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 Db 241 AGGTTTCAGTGGCGGTGGATCTGGGACAGATTTCACTCTCACCATCAACAGTCTGCAACCT 300
 Qy 307 GAAGATTTTGTCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
 |||||
 Db 301 GAAGATTTTGTCAACTTACTATTGTCAACAGGCTTACAGTACCCCTGGACTTTTCGGCCCA 360
 Qy 367 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 426
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 Db 361 GGGACCAAGGTGGAAATCAAACGTACGGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 420
 Qy 427 TCTGATGA 434
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 Db 421 TCTGATGA 428

RESULT 13

US-08-634-223-16

; Sequence 16, Application US/08634223

; Patent No. 5840298

; GENERAL INFORMATION:

; APPLICANT: BRAMS, Peter

; APPLICANT: CHAMAT, Soulaïma Salim

; APPLICANT: PAN, Li-Zhen

; APPLICANT: WALSH, Edward E.

; APPLICANT: HEARD, Cheryl Janne

; APPLICANT: NEWMAN, Roland Anthony

; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN

; TITLE OF INVENTION: MONOCLONAL ANTIBODIES SPECIFIC TO RSV F-PROTEIN AND

; TITLE OF INVENTION: METHODS FOR THEIR MANUFACTURE AND THERAPEUTIC USE

THEREOF

; NUMBER OF SEQUENCES: 19

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Burns, Doane, Swecker & Mathis

; STREET: P.O. Box 1404

; CITY: Alexandria

; STATE: Virginia

; COUNTRY: United States

; ZIP: 22313-1404

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

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;   OPERATING SYSTEM:  PC-DOS/MS-DOS
;   SOFTWARE:  PatentIn Release #1.0, Version #1.30
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;   APPLICATION NUMBER:  US/08/634,223
;   FILING DATE:
;   CLASSIFICATION:
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER:  US/08/488,376
;   FILING DATE:  07-JUN-1995
;   ATTORNEY/AGENT INFORMATION:
;   NAME:  Teskin, Robin L.
;   REGISTRATION NUMBER:  35,030
;   REFERENCE/DOCKET NUMBER:  012712-150
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE:  (703) 836-6620
;   TELEFAX:  (703) 836-2021
;   INFORMATION FOR SEQ ID NO: 16:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH:  705 base pairs
;   TYPE:  nucleic acid
;   STRANDEDNESS:  single
;   TOPOLOGY:  linear
;   MOLECULE TYPE:  DNA (genomic)
;   FEATURE:
;   NAME/KEY:  CDS
;   LOCATION:  1..705
US-08-634-223-16

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Query Match          76.0%;  Score 333.6;  DB 2;  Length 705;
Best Local Similarity 86.2%;  Pred. No. 3.9e-99;
Matches 369;  Conservative 0;  Mismatches 59;  Indels 0;  Gaps 0;

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Qy      7 ATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
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Db      1 ATGGAGACCCCTGCTCAGCTCCTGGGGCTCCTGCTACTCTGGCTCCGAGGTGCCAGATGT 60

Qy     67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
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Db     61 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCTCGGAGACAGAGTCACC 120

Qy    127 ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
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Db    121 ATCACTTGCCGGGCGAGTCAGAGGATTGCTAGTTATTTAAATTGGTATCAGCACAAACCA 180

Qy    187 GAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
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Qy    247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306
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Qy    307 GAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
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Db    301 GAAGATTTTGCAACTTACTATTGTCAACAGGCTTACAGTACCCCTGGACTTTTCGGCCCA 360

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; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..705
US-08-634-224-16

Query Match 76.0%; Score 333.6; DB 2; Length 705;
Best Local Similarity 86.2%; Pred. No. 3.9e-99;
Matches 369; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

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Qy      7 ATGGAGTTCCCGTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
        ||||| ||| | ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1 ATGGAGACCCCTGCTCAGCTCCTGGGGCTCCTGCTACTCTGGCTCCGAGGTGCCAGATGT 60

Qy     67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
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Db     61 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCTGGAGACAGAGTCACC 120

Qy    127 ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    121 ATCACTTGCCGGGCAGGTCAGAGGATTGCTAGTTATTTAAATTGGTATCAGCACAAACCA 180

Qy    187 GAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
        | ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    181 GGGAAAGCCCCTAAGCTCCTGATATATGCTGGATCCAATTTGCACCGTGGGGTCCCGTCA 240

Qy    247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306
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Db    241 AGGTTTCAGTGGCGGTGGATCTGGGACAGATTTCACTCTCACCATCAACAGTCTGCAACCT 300

Qy    307 GAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
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Db    301 GAAGATTTTGCAACTTACTATTGTCAACAGGCTTACAGTACCCCTGGACTTTCGGCCCA 360

Qy    367 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 426
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Qy    427 TCTGATGA 434
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RESULT 15

US-08-634-400-16

; Sequence 16, Application US/08634400

; Patent No. 5939068

; GENERAL INFORMATION:

; APPLICANT: BRAMS, Peter

; APPLICANT: CHAMAT, Soulaïma Salim

; APPLICANT: PAN, Li-Zhen

; APPLICANT: WALSH, Edward E.

; APPLICANT: HEARD, Cheryl Janne

; APPLICANT: NEWMAN, Roland Anthony

; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN

; TITLE OF INVENTION: MONOCLONAL ANTIBODIES SPECIFIC TO RSV F-PROTEIN AND

; TITLE OF INVENTION: METHODS FOR THEIR MANUFACTURE AND THERAPEUTIC USE

THEREOF


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 21: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	% Query						Description
	No.	Score	Match	Length	DB	ID	
	1	389	88.6	463	16	US-10-395-894-24	Sequence 24, Appl
	2	389	88.6	463	17	US-10-695-667-24	Sequence 24, Appl
	3	389	88.6	6082	16	US-10-395-894-10	Sequence 10, Appl
	4	389	88.6	6082	17	US-10-695-667-10	Sequence 10, Appl
	5	385.8	87.9	463	16	US-10-395-894-20	Sequence 20, Appl
	6	385.8	87.9	463	17	US-10-695-667-20	Sequence 20, Appl
	7	385.8	87.9	6082	16	US-10-395-894-9	Sequence 9, Appli
	8	385.8	87.9	6082	17	US-10-695-667-9	Sequence 9, Appli
	9	381.2	86.8	974	9	US-09-859-053-29	Sequence 29, Appl
	10	381.2	86.8	974	17	US-10-625-105-29	Sequence 29, Appl
	11	378.4	86.2	702	17	US-10-684-109-89	Sequence 89, Appl
c	12	378.4	86.2	702	17	US-10-684-109-90	Sequence 90, Appl
	13	378.4	86.2	702	17	US-10-684-109-107	Sequence 107, App
c	14	378.4	86.2	702	17	US-10-684-109-108	Sequence 108, App
	15	376.4	85.7	728	9	US-09-844-684-15	Sequence 15, Appl
	16	376.4	85.7	728	14	US-10-040-244-15	Sequence 15, Appl
	17	376.4	85.7	728	17	US-10-693-629-65	Sequence 65, Appl
	18	376.4	85.7	1106	16	US-10-264-049-121	Sequence 121, App
	19	373.6	85.1	705	15	US-10-292-088-23	Sequence 23, Appl
	20	373.2	85.0	716	9	US-09-844-684-13	Sequence 13, Appl
	21	373.2	85.0	716	14	US-10-040-244-13	Sequence 13, Appl
	22	370.4	84.4	702	17	US-10-684-109-101	Sequence 101, App
c	23	370.4	84.4	702	17	US-10-684-109-102	Sequence 102, App
	24	368.8	84.0	705	15	US-10-292-088-47	Sequence 47, Appl
	25	368.4	83.9	714	14	US-10-153-382-18	Sequence 18, Appl
	26	368.4	83.9	714	18	US-10-612-497-62	Sequence 62, Appl
	27	368.4	83.9	714	18	US-10-776-649-62	Sequence 62, Appl
	28	367.2	83.6	702	17	US-10-684-109-113	Sequence 113, App
c	29	367.2	83.6	702	17	US-10-684-109-114	Sequence 114, App
	30	367.2	83.6	752	17	US-10-684-109-83	Sequence 83, Appl
c	31	367.2	83.6	752	17	US-10-684-109-84	Sequence 84, Appl
	32	365.2	83.2	698	9	US-09-844-684-11	Sequence 11, Appl

	33	365.2	83.2	698	14	US-10-040-244-11	Sequence 11, Appl
	34	365.2	83.2	698	17	US-10-693-629-61	Sequence 61, Appl
	35	365.2	83.2	729	15	US-10-216-484-125	Sequence 125, App
	36	365.2	83.2	729	15	US-10-384-933-125	Sequence 125, App
	37	364	82.9	702	17	US-10-684-109-95	Sequence 95, Appl
c	38	364	82.9	702	17	US-10-684-109-96	Sequence 96, Appl
	39	360.4	82.1	490	10	US-09-918-995-37859	Sequence 37859, A
	40	356.8	81.3	384	15	US-10-389-221-10	Sequence 10, Appl
	41	355.6	81.0	1526	17	US-10-679-620-87	Sequence 87, Appl
	42	355.4	81.0	737	9	US-09-919-344-7	Sequence 7, Appli
	43	354	80.6	514	14	US-10-066-543-2025	Sequence 2025, Ap
c	44	354	80.6	537	14	US-10-066-543-186	Sequence 186, App
	45	353	80.4	928	15	US-10-221-945-5	Sequence 5, Appli

ALIGNMENTS

RESULT 1

US-10-395-394-24

```
; Sequence 24, Application US/10395894
; Publication No. US20040033229A1
; GENERAL INFORMATION:
; APPLICANT: MADDON, Paul J.
; APPLICANT: DONOVAN, Gerald P.
; APPLICANT: OLSON, William C.
; APPLICANT: SCHSLKE, No. US20040033229Albert
; APPLICANT: GARDNER, Jason
; APPLICANT: MA, Dangshe
; TITLE OF INVENTION: PSMA ANTIBODIES AND PROTEIN MULTIMERS
; FILE REFERENCE: P00741.70005.US
; CURRENT APPLICATION NUMBER: US/10/395,894
; CURRENT FILING DATE: 2003-03-24
; PRIOR APPLICATION NUMBER: PCT/US02/33944
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 60/335,215
; PRIOR FILING DATE: 2001-10-23
; PRIOR APPLICATION NUMBER: US 60/362,747
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 60/412,618
; PRIOR FILING DATE: 2002-09-20
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 24
; LENGTH: 463
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Includes BamHI/BglIII cloning junction, signal peptide, V
region, portion
; OTHER INFORMATION: of C region and 3'XbaI/NheI (heavy) or NheI (light)
cloning junction
US-10-395-894-24
```

```
Query Match      88.6%; Score 389; DB 16; Length 463;
Best Local Similarity 94.2%; Pred. No. 8.3e-109;
Matches 404; Conservative 0; Mismatches 25; Indels 0; Gaps 0;
```



```

          |||
Db      1276 AGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 1335
Qy      426 ATCTGATGA 434
          |||
Db      1336 ATCTGATGA 1344

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RESULT 4

US-10-695-667-10

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; Sequence 10, Application US/10695667
; Publication No. US20040161776A1
; GENERAL INFORMATION:
; APPLICANT: MADDON, Paul J.
; APPLICANT: DONOVAN, Gerald P.
; APPLICANT: OLSON, William C.
; APPLICANT: SCHSLKE, Norbert
; APPLICANT: GARDNER, Jason
; APPLICANT: MA, Dangshe
; TITLE OF INVENTION: PSMA FORMULATIONS AND USES THEREOF
; FILE REFERENCE: P0741.70006US00
; CURRENT APPLICATION NUMBER: US/10/695,667
; CURRENT FILING DATE: 2003-10-27
; PRIOR APPLICATION NUMBER: US 10/395,894
; PRIOR FILING DATE: 2003-03-21
; PRIOR APPLICATION NUMBER: PCT/US02/33944
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 60/335,215
; PRIOR FILING DATE: 2001-10-23
; PRIOR APPLICATION NUMBER: US 60/362,747
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 60/412,618
; PRIOR FILING DATE: 2002-09-20
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 10
; LENGTH: 6082
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Plasmid
US-10-695-667-10

```

```

Query Match      88.6%; Score 389; DB 17; Length 6082;
Best Local Similarity 94.2%; Pred. No. 1.4e-108;
Matches 404; Conservative 0; Mismatches 25; Indels 0; Gaps 0;

```

```

Qy      6 CATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCAGGTGCCAGATG 65
          |||
Db      916 CATGAGGGTCCCTGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCAGGTGCCAGATG 975
Qy      65 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125
          |||
Db      976 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 1035
Qy      126 CATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
          |||

```

Db 1036 CATCACTTGTCTGGGCGAGTCAGGGCATTAGCCATTATTTAGCCTGGTTTCAGCAGAAACC 1095
 Qy 186 AGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245
 || |||||
 Db 1096 AGGGAAAGCCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 1155
 Qy 246 AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
 || |||||
 Db 1156 AAAGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTACAGCC 1215
 Qy 306 TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA 365
 |||||
 Db 1216 TGAAGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTTCCCGCTCACTTTCCGGCGG 1275
 Qy 366 GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 425
 |||||
 Db 1276 AGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 1335
 Qy 426 ATCTGATGA 434
 |||||
 Db 1336 ATCTGATGA 1344

RESULT 5

US-10-395-894-20

; Sequence 20, Application US/10395894

; Publication No. US20040033229A1

; GENERAL INFORMATION:

; APPLICANT: MADDON, Paul J.

; APPLICANT: DONOVAN, Gerald P.

; APPLICANT: OLSON, William C.

; APPLICANT: SCHSLKE, No. US20040033229Albert

; APPLICANT: GARDNER, Jason

; APPLICANT: MA, Dangshe

; TITLE OF INVENTION: PSMA ANTIBODIES AND PROTEIN MULTIMERS

; FILE REFERENCE: P00741.70005.US

; CURRENT APPLICATION NUMBER: US/10/395,894

; CURRENT FILING DATE: 2003-03-24

; PRIOR APPLICATION NUMBER: PCT/US02/33944

; PRIOR FILING DATE: 2002-10-23

; PRIOR APPLICATION NUMBER: US 60/335,215

; PRIOR FILING DATE: 2001-10-23

; PRIOR APPLICATION NUMBER: US 60/362,747

; PRIOR FILING DATE: 2002-03-07

; PRIOR APPLICATION NUMBER: US 60/412,618

; PRIOR FILING DATE: 2002-09-20

; NUMBER OF SEQ ID NOS: 33

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 20

; LENGTH: 463

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Includes BamHI/BglII cloning junction, signal peptide, V region, portion

; OTHER INFORMATION: of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning junction


```

; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 60/335,215
; PRIOR FILING DATE: 2001-10-23
; PRIOR APPLICATION NUMBER: US 60/362,747
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 60/412,618
; PRIOR FILING DATE: 2002-09-20
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 20
;   LENGTH: 463
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Includes BamHI/BglII cloning junction, signal peptide, V
region, portion
;   OTHER INFORMATION: of C region and 3'XbaI/NheI (heavy) or NheI (light)
cloning junction
US-10-695-667-20

```

Query Match 87.9%; Score 385.8; DB 17; Length 463;
Best Local Similarity 93.7%; Pred. No. 7.9e-108;
Matches 402; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

Best Local Similarity 93.7%; Pred. No. 7.9e-108;

Matches 402; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

Qy	6	CATGGAGTTCCCCGCTTCAGTCTCCTGGGGCTCCTGCTGCCTGTGTTTTCCCAAGGTGCCAGATG	65
Db	10	CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCCTGTGTTTTCCCAAGGTGCCAGATG	69
Qy	66	TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC	125
Db	70	TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC	129
Qy	126	CATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC	185
Db	130	CATCACTTGTCGGGCGAGTCAGGGCATTAACAATTATTTAGCCTGGTTTCAGCAGAAACC	189
Qy	186	AGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC	245
Db	190	AGGGAAAGCCCCTAAGTCCCTTATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATC	249
Qy	246	AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	305
Db	250	AAAGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	309
Qy	306	TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA	365
Db	310	TGAAGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTACCCGATCACCTTCGGCCA	369
Qy	366	GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC	425
Db	370	AGGGACACGACTGGAGATTAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC	429
Qy	426	ATCTGATGA	434
Db	430	ATCTGATGA	438

RESULT 7

US-10-395-894-9

```
; Sequence 9, Application US/10395894
; Publication No. US20040033229A1
; GENERAL INFORMATION:
; APPLICANT: MADDON, Paul J.
; APPLICANT: DONOVAN, Gerald P.
; APPLICANT: OLSON, William C.
; APPLICANT: SCHSLKE, No. US20040033229Albert
; APPLICANT: GARDNER, Jason
; APPLICANT: MA, Dangshe
; TITLE OF INVENTION: PSMA ANTIBODIES AND PROTEIN MULTIMERS
; FILE REFERENCE: P00741.70005.US
; CURRENT APPLICATION NUMBER: US/10/395,894
; CURRENT FILING DATE: 2003-03-24
; PRIOR APPLICATION NUMBER: PCT/US02/33944
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 60/335,215
; PRIOR FILING DATE: 2001-10-23
; PRIOR APPLICATION NUMBER: US 60/362,747
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 60/412,618
; PRIOR FILING DATE: 2002-09-20
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 6082
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Plasmid
US-10-395-894-9
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Query Match          87.9%; Score 385.8; DB 16; Length 6082;
Best Local Similarity 93.7%; Pred. No. 1.4e-107;
Matches 402; Conservative 0; Mismatches 27; Indels 0; Gaps 0;
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Qy      6 CATGGAGTTCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 65
      |||| | ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      916 CATGAGGGTCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 975

Qy      66 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      976 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 1035

Qy      126 CATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1036 CATCACTTGTCTGGGCGAGTCAGGGCATTACCAATTATTTAGCCTGGTTTCAGCAGAAACC 1095

Qy      186 AGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245
      || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1096 AGGGAAAGCCCCTAAGTCCCTTATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 1155

Qy      246 AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
      || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1156 AAAGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 1215
```

Qy 306 TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA 365
 |||
 Db 1216 TGAAGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTACCCGATCACCTTCGGCCA 1275
 Qy 366 GGGGACCAAGCTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 425
 |||
 Db 1276 AGGGACACGACTGGAGATTAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 1335
 Qy 426 ATCTGATGA 434
 |||
 Db 1336 ATCTGATGA 1344

RESULT 8

US-10-695-667-9

; Sequence 9, Application US/10695667
 ; Publication No. US20040161776A1
 ; GENERAL INFORMATION:
 ; APPLICANT: MADDON, Paul J.
 ; APPLICANT: DONOVAN, Gerald P.
 ; APPLICANT: OLSON, William C.
 ; APPLICANT: SCHSLKE, Norbert
 ; APPLICANT: GARDNER, Jason
 ; APPLICANT: MA, Dangshe
 ; TITLE OF INVENTION: PSMA FORMULATIONS AND USES THEREOF
 ; FILE REFERENCE: P0741.70006US00
 ; CURRENT APPLICATION NUMBER: US/10/695,667
 ; CURRENT FILING DATE: 2003-10-27
 ; PRIOR APPLICATION NUMBER: US 10/395,894
 ; PRIOR FILING DATE: 2003-03-21
 ; PRIOR APPLICATION NUMBER: PCT/US02/33944
 ; PRIOR FILING DATE: 2002-10-23
 ; PRIOR APPLICATION NUMBER: US 60/335,215
 ; PRIOR FILING DATE: 2001-10-23
 ; PRIOR APPLICATION NUMBER: US 60/362,747
 ; PRIOR FILING DATE: 2002-03-07
 ; PRIOR APPLICATION NUMBER: US 60/412,618
 ; PRIOR FILING DATE: 2002-09-20
 ; NUMBER OF SEQ ID NOS: 33
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 9
 ; LENGTH: 6082
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Plasmid
 US-10-695-667-9

Query Match 87.9%; Score 385.8; DB 17; Length 6082;
 Best Local Similarity 93.7%; Pred. No. 1.4e-107;
 Matches 402; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

Qy 6 CATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 65
 |||
 Db 916 CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 975
 Qy 66 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125

; NAME/KEY: 3'UTR
; LOCATION: (750)...(974)
; NAME/KEY: sig_peptide
; LOCATION: (39)...(104)
US-09-859-053-29

Query Match 86.8%; Score 381.2; DB 9; Length 974;
Best Local Similarity 92.4%; Pred. No. 2.4e-106;
Matches 401; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
          ||||| | | ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      39 ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTC 98

Qy     61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     99 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA 158

Qy    121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    159 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGGTTGTTAGCCTGGTATCAGCAG 218

Qy    181 AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    219 AAACCAGGGAAAGCCCCCTAAACTCCTGATCTATGTTGCATCCAGTTTGCAAAGTGGGGTC 278

Qy    241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    279 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 338

Qy    301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    339 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAACAGTTTCCCGTGGACGTTTC 398

Qy    361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    399 GGCCAAGGGACCAAGGTGGAAATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 458

Qy    421 CCGCCATCTGATGA 434
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    459 CCGCCATCTGATGA 472
```

RESULT 10

US-10-625-105-29
; Sequence 29, Application US/10625105
; Publication No. US20040180052A1
; GENERAL INFORMATION:
; APPLICANT: Tsuji, Takashi
; APPLICANT: Tezuka, Katsunari
; APPLICANT: Hori, Nobuaki
; TITLE OF INVENTION: HUMAN MONOCLONAL ANTIBODY AGAINST A
; TITLE OF INVENTION: COSTIMULATORY SIGNAL TRANSDUCTION MOLECULE AILIM AND
; TITLE OF INVENTION: PHARMACEUTICAL USE THEREOF
; FILE REFERENCE: 06501-079001
; CURRENT APPLICATION NUMBER: US/10/625,105
; CURRENT FILING DATE: 2003-07-22

```

; PRIOR APPLICATION NUMBER: US/09/859,053
; PRIOR FILING DATE: 2001-05-16
; PRIOR APPLICATION NUMBER: JP 2001-99508
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: JP 2000-147116
; PRIOR FILING DATE: 2000-05-18
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 29
;   LENGTH: 974
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: 5'UTR
;   LOCATION: (1)...(38)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (39)...(746)
;   FEATURE:
;   NAME/KEY: 3'UTR
;   LOCATION: (750)...(974)
;   FEATURE:
;   NAME/KEY: sig_peptide
;   LOCATION: (39)...(104)
US-10-625-105-29

```

```

Query Match          86.8%;   Score 381.2;   DB 17;   Length 974;
Best Local Similarity 92.4%;   Pred. No. 2.4e-106;
Matches 401;   Conservative 0;   Mismatches 33;   Indels 0;   Gaps 0;

```

```

Qy      1 ATGGACATGGAGTTCCCCGTTCTAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db      39 ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTTC 98

Qy      61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db      99 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA 158

Qy     121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db     159 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGGTTGTTAGCCTGGTATCAGCAG 218

Qy     181 AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db     219 AAACCAGGGAAGCCCCCTAAACTCCTGATCTATGTTGCATCCAGTTTGCAAAGTGGGGTC 278

Qy     241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db     279 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 338

Qy     301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db     339 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAACAGTTTCCCGTGGACGTTT 398

Qy     361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db     399 GGCCAAGGGACCAAGGTGGAATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 458

```

Qy 421 CCGCCATCTGATGA 434
|||||||
Db 459 CCGCCATCTGATGA 472

RESULT 11

US-10-684-109-89

; Sequence 89, Application US/10684109
; Publication No. US20040175379A1
; GENERAL INFORMATION:
; APPLICANT: DeVries, Peter J.
; APPLICANT: Green, Larry L.
; APPLICANT: Ostrow, David H.
; APPLICANT: Reilly, Edward B.
; APPLICANT: Wieler, James
; TITLE OF INVENTION: Erythropoietin Receptor Binding
; TITLE OF INVENTION: Antibodies
; FILE REFERENCE: 6989.US.02
; CURRENT APPLICATION NUMBER: US/10/684,109
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 10/269,711
; PRIOR FILING DATE: 2002-10-14
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 89
; LENGTH: 702
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-684-109-89

Query Match 86.2%; Score 378.4; DB 17; Length 702;
Best Local Similarity 92.8%; Pred. No. 1.6e-105;
Matches 397; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

Qy 7 ATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
||| |
Db 1 ATGAGGGCTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTGCCAGGTGT 60

Qy 67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
||| |
Db 61 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACC 120

Qy 127 ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
||| |
Db 121 ATCACTTGCCGGGCAAGTCAGGGCATTAAAAATGATTTAGGCTGGTATCAGCAGAAACCA 180

Qy 187 GAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
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Db 181 GGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 240

Qy 247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306
||| |
Db 241 AGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCT 300

Qy 307 GAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
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Db      301 GAAGATTTTGCAACTTATTACTGTCTACAGCATAATAGTTATCCGTGCAGTTTTGGCCAG 360
Qy      367 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 426
        |||
Db      361 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 420
Qy      427 TCTGATGA 434
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Db      421 TCTGATGA 428

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RESULT 12

US-10-684-109-90/c

; Sequence 90, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

; TITLE OF INVENTION: Erythropoietin Receptor Binding

; TITLE OF INVENTION: Antibodies

; FILE REFERENCE: 6989.US.02

; CURRENT APPLICATION NUMBER: US/10/684,109

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14

; NUMBER OF SEQ ID NOS: 115

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 90

; LENGTH: 702

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-684-109-90

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Query Match      86.2%; Score 378.4; DB 17; Length 702;
Best Local Similarity 92.8%; Pred. No. 1.6e-105;
Matches 397; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

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Qy      7 ATGGAGTTCCCCGTTCTAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
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Db      702 ATGAGGCTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTGCCAGGTGT 643
Qy      67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
        |||
Db      642 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACC 583
Qy      127 ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
        |||
Db      582 ATCACTTGCCGGGCAAGTCAGGGCATTAATAATGATTTAGGCTGGTATCAGCAGAAACCA 523
Qy      187 GAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
        |||
Db      522 GGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 463
Qy      247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306

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Db      462  |||||
AGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACCTCTCACAATCAGCAGCCTGCAGCCT 403

Qy      307  GAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
      402  |||||
GAAGATTTTGCAACTTATTACTGTCTACAGCATAATAGTTATCCGTGCAGTTTGGCCAG 343

Qy      367  GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 426
      342  |||||
GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 283

Qy      427  TCTGATGA 434
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Db      282  TCTGATGA 275

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RESULT 13

US-10-684-109-107

; Sequence 107, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

; TITLE OF INVENTION: Erythropoietin Receptor Binding

; TITLE OF INVENTION: Antibodies

; FILE REFERENCE: 6989.US.02

; CURRENT APPLICATION NUMBER: US/10/684,109

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14

; NUMBER OF SEQ ID NOS: 115

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 107

; LENGTH: 702

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-684-109-107

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Query Match      86.2%;  Score 378.4;  DB 17;  Length 702;
Best Local Similarity  92.8%;  Pred. No. 1.6e-105;
Matches 397;  Conservative  0;  Mismatches 31;  Indels  0;  Gaps  0;

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Qy      7  ATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
      |||  ||||  |||||
Db      1  ATGAGGCTCCCTGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTGCCAGGTGT 60

Qy      67  GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
      |||||
Db      61  GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACC 120

Qy      127  ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
      |||||  ||||  |||||  |||||  ||||  |||||
Db      121  ATCACTTGCCGGGCAAGTCAGGGCATTAGAAATGATTTAGGCTGGTATCAGCAGAAACCG 180

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Qy      127 ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
      |||
Db      582 ATCACTTGCCGGGCAAGTCAGGGCATTAGAAATGATTAGGCTGGTATCAGCAGAAACCG 523

Qy      187 GAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
      |||
Db      522 GGGAAAGCCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 463

Qy      247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306
      |||
Db      462 AGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACCTCTACAATCAGCAGCCTGCAGCCT 403

Qy      307 GAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
      |||
Db      402 GAAGATTTTGCAACTTATTACTGTCTACAGCATAATAGTTACCCGTGCAGTTTGGCCAG 343

Qy      367 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 426
      |||
Db      342 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 283

Qy      427 TCTGATGA 434
      |||
Db      282 TCTGATGA 275

```

RESULT 15

US-09-844-684-15

; Sequence 15, Application US/09844684

; Patent No. US20020142358A1

; GENERAL INFORMATION:

; APPLICANT: GEMINI SCIENCE, INC.

; APPLICANT: LA JOLLA INSTITUTE FOR ALLERGY AND IMMUNOLOGY

; TITLE OF INVENTION: HUMAN ANTI-CD40 ANTIBODIES AND METHODS OF MAKING SAME

; FILE REFERENCE: 21286/0276339

; CURRENT APPLICATION NUMBER: US/09/844,684

; CURRENT FILING DATE: 2001-04-27

; PRIOR APPLICATION NUMBER: US 60/200,601

; PRIOR FILING DATE: 2000-04-28

; NUMBER OF SEQ ID NOS: 15

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 15

; LENGTH: 728

; TYPE: DNA

; ORGANISM: Homo sapiens

US-09-844-684-15

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Query Match      85.7%;  Score 376.4;  DB 9;  Length 728;
Best Local Similarity  91.7%;  Pred. No. 6.6e-105;
Matches 398;  Conservative  0;  Mismatches  36;  Indels  0;  Gaps  0;

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Qy      1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
      |||
Db      59 ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTTC 118

Qy      61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
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Db      119 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGGATCTGTAGGAGACAGA 178
Qy      121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
      |||
Db      179 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 238
Qy      181 AAACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
      |||
Db      239 AAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGGATCCAGTTTGCAAAGTGGGGTC 298
Qy      241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
      |||
Db      299 CCATCAAGGTTTCAGCGGCAGTGGATTTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 358
Qy      301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
      |||
Db      359 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAGCAGTTTCCCTCGGACATTC 418
Qy      361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
      |||
Db      419 GGCCAAGGGACCAAGGTGGAGATCAAACGTACGGTGGCTGCACCATCTGTCTTCATCTTC 478
Qy      421 CCGCCATCTGATGA 434
      |||
Db      479 CCGCCATCTGATGA 492

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Search completed: December 3, 2004, 02:43:21
Job time : 337.578 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 12:19:03 ; Search time 2285.1 Seconds
(without alignments)
7000.593 Million cell updates/sec

Title: US-08-728-463B-208
Perfect score: 439
Sequence: 1 ATGGACATGGAGTTCCCCGT.....CCCGCCATCTGATGAAGCTT 439

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 32822875 seqs, 18219865908 residues

Total number of hits satisfying chosen parameters: 65645750

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : EST:*
 1: gb_est1:*
 2: gb_est2:*
 3: gb_htc:*
 4: gb_est3:*
 5: gb_est4:*
 6: gb_est5:*
 7: gb_est6:*
 8: gb_gss1:*
 9: gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Result	Query									
No.	Score	Match	Length	DB	ID	Description				
1	395.6	90.1	943	2	BF976230	BF976230	602245105			
2	394	89.7	961	4	BG341988	BG341988	602463136			
3	389.2	88.7	886	4	BG756818	BG756818	602710291			
4	388.2	88.4	689	6	CB055233	CB055233	NISC_gm08			
5	384.6	87.6	538	6	CD691107	CD691107	EST7630	h		
6	384.4	87.6	606	6	CD690290	CD690290	EST6813	h		
7	384.4	87.6	610	6	CD691065	CD691065	EST7588	h		
8	384.4	87.6	1100	2	BF663472	BF663472	602144635			
9	383.4	87.3	813	4	BG431143	BG431143	602498773			
10	382.8	87.2	736	6	CB986552	CB986552	AGENCOURT			
11	382.8	87.2	755	4	BG533970	BG533970	602553071			
12	382.8	87.2	769	6	CB957759	CB957759	AGENCOURT			
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17	378.8	86.3	475	6	CD706608	CD706608	EST23135			
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19	376.4	85.7	597	6	CD704919	CD704919	EST21446			
20	376.4	85.7	750	6	CB985329	CB985329	AGENCOURT			
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23	375.6	85.6	894	4	BG341803	BG341803	602463535			
24	375	85.4	726	6	CB986484	CB986484	AGENCOURT			
25	374.8	85.4	497	6	CD696718	CD696718	EST13241			
26	374.8	85.4	558	6	CD690030	CD690030	EST6553	h		
27	374.8	85.4	625	6	CD688395	CD688395	EST4917	h		
28	374.8	85.4	684	4	BG686677	BG686677	602650635			
29	374.8	85.4	697	6	CD699896	CD699896	EST16420			
30	374.8	85.4	761	4	BG745186	BG745186	602723509			
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32	374	85.2	851	4	BG686018	BG686018	602638582			
33	373.2	85.0	624	6	CD690145	CD690145	EST6668	h		
34	373.2	85.0	631	4	BM818943	BM818943	K-EST0086			
35	373.2	85.0	805	6	CB955618	CB955618	AGENCOURT			
36	373.2	85.0	867	4	BG754732	BG754732	602714301			

37	371.6	84.6	481	6	CD695408	CD695408	EST11931
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39	371.6	84.6	556	6	CD694411	CD694411	EST10934
40	371.6	84.6	588	6	CD705013	CD705013	EST21540
41	371.6	84.6	617	6	CD689887	CD689887	EST6410 h
42	371.6	84.6	770	6	CB987520	CB987520	AGENCOURT
43	371.6	84.6	920	7	CO583330	CO583330	ILLUMIGEN
44	370.8	84.5	921	4	BG341239	BG341239	602463904
45	370.2	84.3	757	6	CB985034	CB985034	AGENCOURT

ALIGNMENTS

RESULT 1

BF976230

LOCUS BF976230 943 bp mRNA linear EST 22-JAN-2001

DEFINITION 602245105F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4336225 5', mRNA sequence.

ACCESSION BF976230

VERSION BF976230.1 GI:12343445

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 943)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Louis M. Staudt, M.D., Ph.D.

cDNA Library Preparation: Ling Hong/Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM1208 row: j column: 02

High quality sequence stop: 721.

FEATURES

source

Location/Qualifiers

1. .943

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:4336225"

/tissue_type="primary B-cells from tonsils (cell line)"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_48"

/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;

Site_2: EcoRI; cDNA made by oligo-dT priming.

Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit

(Stratagene) and Superscript II RT (Life Technologies).
Note: this is a NIH_MGC Library."

ORIGIN

Query Match 90.1%; Score 395.6; DB 2; Length 943;
Best Local Similarity 94.5%; Pred. No. 2.6e-106;
Matches 410; Conservative 0; Mismatches 24; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCGTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
        |||||
Db      18 ATGGACATGAGGGTCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTC 77

Qy     61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
        |||||
Db     78 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA 137

Qy    121 GTCACCATCACTTGTTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
        |||||
Db    138 GTCACCATCACTTGTTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 197

Qy    181 AAACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
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Db    198 AAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC 257

Qy    241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
        |||||
Db    258 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 317

Qy    301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
        |||||
Db    318 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAACAGTTTCCCTCACACTTTT 377

Qy    361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
        |||||
Db    378 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 437

Qy    421 CCGCCATCTGATGA 434
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Db    438 CCGCCATCTGATGA 451
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RESULT 2

BG341988

LOCUS BG341988 961 bp mRNA linear EST 27-FEB-2001
DEFINITION 602463136F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4575800 5',
mRNA sequence.

ACCESSION BG341988

VERSION BG341988.1 GI:13148426

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 961)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
cDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
Plate: LLCM1287 row: h column: 09
High quality sequence stop: 655.

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FEATURES
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                /organism="Homo sapiens"
                /mol_type="mRNA"
                /db_xref="taxon:9606"
                /clone="IMAGE:4575800"
                /tissue_type="primary B-cells from tonsils (cell line)"
                /lab_host="DH10B (phage-resistant)"
                /clone_lib="NIH_MGC_48"
                /note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
                Site_2: EcoRI; cDNA made by oligo-dT priming.
                Directionally cloned into EcoRI/XhoI sites using the
                following 5' adaptor: GGCACGAG(G). Size-selected >500bp
                for average insert size 1.8kb. Library constructed by Ling
                Hong in the laboratory of Gerald M. Rubin (University of
                California, Berkeley) using ZAP-cDNA synthesis kit
                (Stratagene) and Superscript II RT (Life Technologies).
                Note: this is a NIH MGC Library."

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ORIGIN

Query Match 89.7%; Score 394; DB 4; Length 961;
Best Local Similarity 94.2%; Pred. No. 8e-106;
Matches 409; Conservative 0; Mismatches 25; Indels 0; Gaps 0;

[illegible]

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Qy 361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
 ||| ||||||||| |||||||||||||||||||||||||||||||||||

Db 376 GGCGGAGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 435

Qy 421 CCGCCATCTGATGA 434
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Db 436 CCGCCATCTGATGA 449

RESULT 3

BG756818

LOCUS BG756818 886 bp mRNA linear EST 15-MAY-2001

DEFINITION 602710291F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4850686 5', mRNA sequence.

ACCESSION BG756818

VERSION BG756818.1 GI:14067471

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 886)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Louis M. Staudt, M.D., Ph.D.

cDNA Library Preparation: Ling Hong/Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM1692 row: e column: 23

High quality sequence stop: 864.

FEATURES

source

Location/Qualifiers

1. .886

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:4850686"

/tissue_type="primary B-cells from tonsils (cell line)"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_48"

/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;

Site_2: EcoRI; cDNA made by oligo-dT priming.

Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies).

Note: this is a NIH_MGC Library."

ORIGIN

Query Match 88.7%; Score 389.2; DB 4; Length 886;
Best Local Similarity 93.5%; Pred. No. 2.1e-104;
Matches 406; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

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Db	10	ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCACAGGTGCC	69
Qy	61	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	120
Db	70	AGGTGTGACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGA	129
Qy	121	GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG	180
Db	130	GTCACCATCACTTGCCGGGCAAGTCAGGGCATTAGAAATGATTAGGCTGGTATCAGCAG	189
Qy	181	AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC	240
Db	190	AAACCAGGGAAAGCCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC	249
Qy	241	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
Db	250	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTG	309
Qy	301	CAGCCTGAAGATTTTGCACCTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT	360
Db	310	CAGCCTGAAGATTTTGCACCTTATTACTGTCTACAGCATAATAGTTACCCGTACACTTTT	369
Qy	361	GGCCAGGGGACCAAGCTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC	420
Db	370	GGCCTGGGGACCAAGCTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC	429
Qy	421	CCGCCATCTGATGA	434
Db	430	CCGCCATCTGATGA	443

RESULT 4

CB055233

LOCUS	CB055233	689 bp	mRNA	linear	EST 17-JAN-2003
-------	----------	--------	------	--------	-----------------

DEFINITION NISC gm08f08.y1 NCI CGAP Brn23 Homo sapiens cDNA clone

IMAGE:3291807 5', mRNA sequence.

ACCESSION CB055233

VERSION CB055233.1 GI:27793520

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 689)

AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.

TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index

JOURNAL Unpublished (1997)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cqapbs-r@mail.nih.gov

cDNA Library Arrayed by: The I.M.A.G.E. Consortium/LLNL
DNA Sequencing by: National Institutes of Health Intramural
Sequencing Center (NISC)

info@image.llnl.gov

Seq primer: M13RP1 reverse primer (ABI).

Location/Qualifiers

1. .689

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/mol type="mRNA"
```

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/clone="IMAGE:3291807"
```

```
/lab host="DH10B"
```

```
/clone lib="NCI C
```

```
/note="Organ: brain; Vector:
```

modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5' TGTTACCAATCTGAAGTGGGAGCGGCCGCATATCTTTTTTTTTTTTTTTTTTTTTT T 3']; double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. Library is normalized, and was constructed by Bento Soares and M.Fatima Bonaldo."

Query Match 88.4%; Score 388.2; DB 6; Length 689;
Best Local Similarity 93.5%; Pred. No. 3.9e-104;
Matches 405; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy	2	TGGACATGAGATTCCCCGTTCAGCTCCTGGGGCTCCTGCCTGCTCTGTTTCCCAGGTGCCA	61
Db	10	TGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCCTGCTCTGGCTCCCAGGTGCCA	69
Qy	62	GATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAG	121
Db	70	AATGTGACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAG	129
Qy	122	TCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGA	181
Db	130	TCACCATCCCTTGCCGGGCCAGTCAGAGTATTAGTAGCTGGTTGGCCTGGTATCAGCAGA	189
Qy	182	AACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCC	241
Db	190	AACCAGGGAAAGCCCCTAAGCTCCTGATCTATAAGGCATCTAGTTTAGAAAGTGGGGTCC	249
Qy	242	CATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGC	301
Db	250	CATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGC	309
Qy	302	AGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTG	361
Db	310	AGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTACCCGTACACTTTTG	369

Qy 362 GCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCC 421
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 370 GCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCC 429

Qy 422 CGCCATCTGATGA 434
 ||||||||||||
 Db 430 CGCCATCTGATGA 442

RESULT 5

```

CD691107
LOCUS          CD691107              538 bp      mRNA      linear      EST 25-JUN-2003
DEFINITION     EST7630 human nasopharynx Homo sapiens cDNA, mRNA sequence.
ACCESSION      CD691107
VERSION        CD691107.1  GI:32212503
KEYWORDS       EST.
SOURCE         Homo sapiens (human)
  ORGANISM     Homo sapiens
               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
               Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE      1 (bases 1 to 538)
AUTHORS        Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
               Zeng,Y.-X.
TITLE          Transcriptional Gene Expression Profile of Human Nasopharynx
JOURNAL        Unpublished (2003)
COMMENT        Contact: YiXin Zeng
               Cancer Center
               Sun Yat-sen University
               651 DongFeng Road East, GuangZhou 510060, China
               Tel: 86-1380-9770-743
               Fax: 86-20-8775-4506
               Email: yxzeng@gzsums.edu.cn.
FEATURES       Location/Qualifiers
  source       1. .538
               /organism="Homo sapiens"
               /mol_type="mRNA"
               /db_xref="taxon:9606"
               /tissue_type="normal nasopharynx"
               /clone_lib="human nasopharynx"
               /note="ESTs generated from a normal nasopharynx cDNA
               library from southern Chinese"

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ORIGIN

Query Match 87.6%; Score 384.6; DB 6; Length 538;
Best Local Similarity 94.3%; Pred. No. 4.3e-103;
Matches 410; Conservative 0; Mismatches 24; Indels 1; Gaps 1;

Qy	1	ATGGACATGGAGTTC	CCCCGTT	CAGCTCCTGGGGCTCCTGCTGCTCTGTTTCC	CAGGTGCC	60
Db	50	ATGGACATGAGGGT	CTCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCC	CAGGTGCC	109	
Qy	61	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	120			
Db	110	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	169			
Qy	121	GTCACCATCACTTGT	CGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG	180		

Query Match 87.6%; Score 384.4; DB 6; Length 606;
 Best Local Similarity 92.9%; Pred. No. 5.1e-103;
 Matches 403; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCGTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db      68 ATGGACATGAGGGTCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTC 127

Qy      61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     128 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCTGTGTCTGCATCTGTAGGAGACAGA 187

Qy     121 GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     188 GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 247

Qy     181 AAACCAGAGAAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     248 AAACCAGGGAAAAGCCCCCTAAGTCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC 307

Qy     241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     308 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACTATCAGCAGCCTG 367

Qy     301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     368 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAACAGTTTCCCCGCCACTTTC 427

Qy     361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
        |||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     428 GCGGAGGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 487

Qy     421 CCGCCATCTGATGA 434
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     488 CCGCCATCTGATGA 501
  
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RESULT 7

CD691065

LOCUS CD691065 610 bp mRNA linear EST 25-JUN-2003

DEFINITION EST7588 human nasopharynx Homo sapiens cDNA, mRNA sequence.

ACCESSION CD691065

VERSION CD691065.1 GI:32212419

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 610)

AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
 Zeng,Y.-X.

TITLE Transcriptional Gene Expression Profile of Human Nasopharynx

JOURNAL Unpublished (2003)

COMMENT Contact: YiXin Zeng

Cancer Center

Sun Yat-sen University

651 DongFeng Road East, GuangZhou 510060, China

Tel: 86-1380-9770-743
Fax: 86-20-8775-4506
Email: yxzeng@gzsums.edu.cn.

FEATURES Location/Qualifiers
 source 1. .610
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /tissue_type="normal nasopharynx"
 /clone_lib="human nasopharynx"
 /note="ESTs generated from a normal nasopharynx cDNA
 library from southern Chinese"

ORIGIN

Query Match 87.6%; Score 384.4; DB 6; Length 610;
Best Local Similarity 92.9%; Pred. No. 5.1e-103;
Matches 403; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

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Qy      1  ATGGACATGGAGTTCCCGGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
      |||
Db      44  ATGGACATGAGGGTCCCGGCTCAGCTCCGGGGGCTCCTGCTGCTCTGGCTCCCAGGTGCC 103

Qy      61  AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
      |
Db     104  AAATGTGACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGA 163

Qy     121  GTCACCATCACTTGTGCGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
      |||
Db     164  GTCACCATCACTTGCCGGGCCAGTCAGAGTATTAGTAGCTGGTTGGCCTGGTATCAGCAA 223

Qy     181  AAACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
      |||
Db     224  AAACCAGGGAAAGCCCCTAAGTCCCTGATCTATAAGGCGTCTAGTTTAGAAAGTGGGGTC 283

Qy     241  CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
      |||
Db     284  CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTG 343

Qy     301  CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
      |||
Db     344  CAGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTATCCGTACACTTTT 403

Qy     361  GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
      |||
Db     404  GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 463

Qy     421  CCGCCATCTGATGA 434
      |||
Db     464  CCGCCATCTGATGA 477
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RESULT 8

BF663472

LOCUS BF663472 1100 bp mRNA linear EST 21-DEC-2000

DEFINITION 602144635F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4297736 5',
 mRNA sequence.

ACCESSION BF663472

VERSION BF663472.1 GI:11937367
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 1100)
 AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
 cDNA Library Preparation: Ling Hong/Rubin Laboratory
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LLCM1152 row: f column: 09
 High quality sequence stop: 704.
 FEATURES Location/Qualifiers
 source 1..1100
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:4297736"
 /tissue_type="primary B-cells from tonsils (cell line)"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="NIH_MGC_48"
 /note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
 Site_2: EcoRI; cDNA made by oligo-dT priming.
 Directionally cloned into EcoRI/XhoI sites using the
 following 5' adaptor: GGCACGAG(G). Size-selected >500bp
 for average insert size 1.8kb. Library constructed by Ling
 Hong in the laboratory of Gerald M. Rubin (University of
 California, Berkeley) using ZAP-cDNA synthesis kit
 (Stratagene) and Superscript II RT (Life Technologies).
 Note: this is a NIH_MGC Library."

ORIGIN

Query Match 87.6%; Score 384.4; DB 2; Length 1100;
 Best Local Similarity 92.9%; Pred. No. 5.9e-103;
 Matches 403; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCCGTTCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 50
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db      8 ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTCC 67

Qy     61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     68 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA 127

Qy    121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db    128 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 187
  
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ORIGIN

Qy	1	ATGGACATGGAGTTCCTCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCAGGTGCC	60
Db	27	ATGGACATGAGAGTCCTCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCAGGTGCC	86
Qy	61	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	120
Db	87	AGATGTGACATTCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	146
Qy	121	GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG	180
Db	147	GTCACCATCACTTGTCTGGGCGAGTCAGGGCATTAGCAATTATTTAGCCTGGTTTCAGCAG	206
Qy	191	AAACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC	240
Db	207	AAACCAGGGAAAGCCCCTAAGTCCCTGATGTATGCTGCATCCAGTNTGCAAAGTGGAGTC	266
Qy	241	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
Db	267	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAACAGCCTG	326
Qy	301	CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT	360
Db	327	CAGCCTGAAGACTTTGCAATTTATTACTGCCTACAGTATAATACTTACCCTCATACTTTC	386
Qy	361	GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC	420
Db	387	GGCGGAGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC	446
Qy	421	CCGCCATCTGATGA	434
Db	447	CCGCCATCTGATGA	460

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LOCUS       CB986552                736 bp      mRNA      linear      EST 01-MAY-2003
DEFINITION  AGENCOURT_13646929 NIH_MGC_184 Homo sapiens cDNA clone
            IMAGE:30327773 5', mRNA sequence.
ACCESSION   CB986552
VERSION     CB986552.1  GI:30281072
KEYWORDS    EST.
SOURCE      Homo sapiens (human)

```

ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 736)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits
 cDNA Library Preparation: CLONTECH Laboratories, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Agencourt Bioscience Corporation
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: NDCM137 row: f column: 06
 High quality sequence stop: 538.

FEATURES Location/Qualifiers

source 1..736
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:30327773"
 /lab_host="DH10B (T1 phage-resistant)"
 /clone_lib="NIH_MGC_184"
 /note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
 SfiI (ggccattatggcc); Site_2: SfiI (ggccgcctcgcc);
 Library is oligo-dT primed and directionally cloned. cDNA
 was prepared from a glandular pool of tissues from thyroid,
 parathyroid, adrenal, cortex and pineal gland. 5' and 3'
 adaptors were used in cloning as follows: 5' adaptor
 sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
 5'-ATTCTAGAGGCCGAGGCGGCCGACATG-dT(30)BN-3' (where B = A,
 C, or G and N = A, C, G, or T). Average insert size 1.38
 kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
 by PCR. This library was enriched for full-length clones
 and was constructed by Clontech Laboratories (Palo Alto,
 CA). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 87.2%; Score 382.8; DB 6; Length 736;
 Best Local Similarity 92.6%; Pred. No. 1.6e-102;
 Matches 402; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
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Db      29 ATGGACATGAGAGTCCTCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 88

Qy      61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      89 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACACA 148

Qy     121 GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     149 GTCACCATCACTTGTCGGGCGAGTCAGGACATCAGCAATTATTTAGCCTGGTATCAGCAG 208

```


SfiI (ggccgcctcggcc); Site_2: SfiI (ggccattatggcc); 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence: 5'-ATTCTAGAGGCCGAGGCGGCCGACATG-dT(30)BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.9 kb (range 0.5-4.0 kb). 12/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA). Note: this is a NIH_MGC Library."

ORIGIN

```

Query Match          87.2%;  Score 382.8;  DB 4;  Length 755;
Best Local Similarity 92.6%;  Pred. No. 1.6e-102;
Matches 402;  Conservative 0;  Mismatches 32;  Indels 0;  Gaps 0;

Qy      1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
      |||
Db      28 ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTCC 87

Qy      61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
      |||
Db      88 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACGGA 147

Qy     121 GTCACCATCACTTGTCTGGGCGAGTCAAGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
      |||
Db     148 GTCACCATCACTTGTCTGGGCGAGTCAAGGTATCAGCAGCTGGTTAGCCTGGTATCAGCAG 207

Qy     181 AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
      |||
Db     208 AAAGCAGGGAAAGCCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC 267

Qy     241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
      |||
Db     268 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 327

Qy     301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
      |||
Db     328 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGGTAACAGTTTCCCTTTCACTTTT 387

Qy     361 GGCCAGGGGACCAAGCTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC 420
      |||
Db     388 GGCGGAGGGACCAAGGTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC 447

Qy     421 CCGCCATCTGATGA 434
      |||
Db     448 CCGCCATCTGATGA 461

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RESULT 12

CB957759

LOCUS CB957759 769 bp mRNA linear EST 29-APR-2003

DEFINITION AGENCOURT_13778810 NIH_MGC_184 Homo sapiens cDNA clone
IMAGE:30351152 5', mRNA sequence.

ACCESSION CB957759

VERSION CB957759.1 GI:30213876

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 769)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits
 cDNA Library Preparation: CLONTECH Laboratories, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Agencourt Bioscience Corporation
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: NDCM148 row: d column: 09
 High quality sequence stop: 523.

FEATURES Location/Qualifiers

source 1..769
 /organism="Homo sapiens"
 /mol_type="mRNA"
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 /clone="IMAGE:30351152"
 /lab_host="DH10B (T1 phage-resistant)"
 /clone_lib="NIH_MGC_184"
 /note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
 SfiI (ggccattatggcc); Site_2: SfiI (ggcgcctcggcc);
 Library is oligo-dT primed and directionally cloned. cDNA
 was prepared from a glandular pool of tissues from thyroid,
 parathyroid, adrenal, cortex and pineal gland. 5' and 3'
 adaptors were used in cloning as follows: 5' adaptor
 sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
 5'-ATTCTAGAGGCCGAGGCCGACATG-dT(30)BN-3' (where B = A,
 C, or G and N = A, C, G, or T). Average insert size 1.38
 kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
 by PCR. This library was enriched for full-length clones
 and was constructed by Clontech Laboratories (Palo Alto,
 CA). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 87.2%; Score 382.8; DB 6; Length 769;
 Best Local Similarity 92.6%; Pred. No. 1.6e-102;
 Matches 402; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCCGTTCTAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
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Db      27 ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGCTCCCAGGTGCC 86

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Db      87 AGATGTGACATTAGTTGACCCAGTCTCCATCCTTCCTGTCTGCATCTGTAGGAGACAGA 146

Qy     121 GTCACCATCACTTGTGCGGGCAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
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Qy	181	AAACCAGAGAAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC	240
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Qy	241	CCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
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Db	327	CAGCCTGAAGATTTTGCAACTTATTACTGTCAACAGCTTAATAATTACCCGTACACTTTT	386
Qy	361	GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC	420
Db	387	GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC	446
Qy	421	CCGCCATCTGATGA	434
Db	447	CCGCCATCTGATGA	460

RESULT 13

CD710508

LOCUS CD710508 574 bp mRNA linear EST 25-JUN-2003

DEFINITION EST27035 human nasopharynx Homo sapiens cDNA, mRNA sequence.

ACCESSION CD710508

VERSION CD710508.1 GI:32241138

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 574)

AUTHORS Liu, X.-Q., Zhou, Y., Zhang, L.-J., Xu, H., Chen, H.-K., Pan, Z.-G. and
 Zeng, Y.-X.

TITLE Transcriptional Gene Expression Profile of Human Nasopharynx

JOURNAL Unpublished (2003)

COMMENT Contact: YiXin Zeng

Cancer Center

Sun Yat-sen University

651 DongFeng Road East, GuangZhou 510060, China

Tel: 86-1380-9770-743

Fax: 86-20-8775-4506

Email: yxzeng@gzsums.edu.cn.

FEATURES	Location/Qualifiers
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/db xref="taxon:9606"
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/clone lib="human nasopharynx"
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/note="ESTs generated from a normal nasopharynx cDNA

library from southern Chinese"

ORIGIN

Query Match 86.8%; Score 381.2; DB 6; Length 574;

Best Local Similarity 92.4%; Pred. No. 4.5e-102;

Matches 401; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
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Qy     121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGT'TAGCCTGGTATCAGCAG 180
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Qy     361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACGTGGGCTGCACCATCTGTCTTCATCTTC 420
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Qy     421 CCGCCATCTGATGA 434
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Db     484 CCGCCATCTGATGA 497
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RESULT 14

CD690596

LOCUS CD690596 513 bp mRNA linear EST 25-JUN-2003

DEFINITION EST7119 human nasopharynx Homo sapiens cDNA, mRNA sequence.

ACCESSION CD690596

VERSION CD690596.1 GI:32211490

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 513)

AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
Zeng,Y.-X.

TITLE Transcriptional Gene Expression Profile of Human Nasopharynx

JOURNAL Unpublished (2003)

COMMENT Contact: YiXin Zeng

Cancer Center

Sun Yat-sen University

651 DongFeng Road East, GuangZhou 510060, China

Tel: 86-1380-9770-743

Fax: 86-20-8775-4506

FEATURES

ORIGIN

Qy	1	ATGGACATGGAGTTCCCGTTCAGCTCCTGGGCTCCTGCCTGTCTGTTTTCCCAGGTGCC	60
Db	56	ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGCTCCCAGGTGCC	115
Qy	61	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	120
Db	116	AAATGTGACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCGTCTGTAGGAGACAGA	175
Qy	121	GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG	180
Db	176	GTCACCATCACTTGCCGGGCCAGTCAGAGTCTTAGTGGCTACTTGGCCTGGTATCAGCAG	235
Qy	181	AAACCAGAGAAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC	240
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Db	296	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACGGAATTCACTCTCACCATCAGCAGCCTG	355
Qy	301	CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT	360
Db	356	CAGCCTGATGATTTGGCAACTTATTACTGCCAACAGTATAATAGTTATCCGTACGCTTTT	415
Qy	361	GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC	420
Db	416	GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC	475
Qy	421	CCGCCATCTGATGA	434
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CD697196

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LOCUS       CD697196                545 bp      mRNA      linear      EST 25-JUN-2003
DEFINITION  EST13719 human nasopharynx Homo sapiens cDNA, mRNA sequence.
ACCESSION   CD697196
VERSION     CD697196.1  GI:32224445
KEYWORDS    EST.
SOURCE      Homo sapiens (human)
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ORGANISM	Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE	1 (bases 1 to 545)
AUTHORS	Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and Zeng,Y.-X.
TITLE	Transcriptional Gene Expression Profile of Human Nasopharynx
JOURNAL	Unpublished (2003)
COMMENT	Contact: YiXin Zeng Cancer Center Sun Yat-sen University 651 DongFeng Road East, GuangZhou 510060, China Tel: 86-1380-9770-743 Fax: 86-20-8775-4506 Email: yxzeng@gzsums.edu.cn.

FEATURES Location/Qualifiers

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 /mol_type="mRNA"

 /db_xref="taxon:9606"

 /tissue_type="normal nasopharynx"

 /clone_lib="human nasopharynx"

 /note="ESTs generated from a normal nasopharynx cDNA library from southern Chinese"

ORIGIN

Query Match 86.5%; Score 379.6; DB 6; Length 545;

Best Local Similarity 92.2%; Pred. No. 1.3e-101;

Matches 400; Conservative 0; Mismatches 34; Indels 0; Gaps 0;

Qy 1 ATGGACATGGAGTTCCCCGTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTTCCAGGTGCC 60

Db 57 ATGGACATGAGGGTCCCCGTTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTGCC 116

Qy 61 AGATGTGCATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120

Db 117 AGGTGTGCATCCAGATGACCCAGTCTCCATCTGCCATGTCTGCATCTGTAGGAGACAGA 176

Qy 121 GTCACCATCACTTGTCGGGCGAGTCAGGGATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180

Db 177 GTCACCATCACTTGTCGGGCGAGTCAGGGCATTAGCAATTATTAGCCTGGTTTCAGCAG 236

Qy 181 AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240

Db 237 AAACCAGGAAAAGTCCCTAAGCGCCTGATCTATGCTGCATCCACTTTGCAAAGTGGGGTC 296

Qy 241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300

Db 297 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGAA TTCACTCTACAATCAGCAGCCTG 356

Qy 301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360

Db 357 CAGCCTGAAGATTTTGCAACTTATTACTGTCTACAGCATAATTATTATCCGTACACTTTT 416

Qy 361 GGCCAGGGGACCAAGCTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC 420

Db 417 GGCCAGTGGACCAAGGTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC 476

Qy 421 CCGCCATCTGATGA 434
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Db 477 CCGCCATCTGATGA 490

Search completed: December 2, 2004, 20:56:34
Job time : 2287.1 secs

GenCore version 5.1.6
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OM nucleic - nucleic search; using sw model

Run on: December 2, 2004, 12:19:02 ; Search time 2803.28 Seconds
(without alignments)
8839.572 Million cell updates/sec

Title: US-08-728-463B-219
Perfect score: 524
Sequence: 1 AAGCTTGCCACCATGAAACA.....GACTACTTCCCCGAACCGGT 524

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 4526729 seqs, 23644849745 residues

Total number of hits satisfying chosen parameters: 9053458

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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2: gb_htg:*
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4: gb_om:*
5: gb_ov:*
6: gb_pat:*
7: gb_ph:*
8: gb_pl:*
9: gb_pr:*
10: gb_ro:*
11: gb_sts:*
12: gb_sy:*
13: gb_un:*
14: gb_vi:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result	No.	Score	Query Match	Length	DB	ID	Description
	1	524	100.0	524	6	AR161428	AR161428 Sequence
	2	524	100.0	524	6	AR369973	AR369973 Sequence
	3	524	100.0	524	6	BD096607	BD096607 Transgeni

4	524	100.0	4926	6	AR161427	AR161427 Sequence
5	524	100.0	4926	6	AR370022	AR370022 Sequence
6	524	100.0	4926	6	BD096656	BD096656 Transgeni
7	436.8	83.4	1507	6	BD000501	BD000501 Process f
8	423.6	80.8	1581	9	BC073766	BC073766 Homo sapi
9	399	76.1	1634	6	BD217688	BD217688 Immune sy
10	397.2	75.8	1418	6	A49389	A49389 Sequence 7
11	395.6	75.5	1418	6	AR176296	AR176296 Sequence
12	392.8	75.0	1567	6	AR135359	AR135359 Sequence
13	392	74.8	1599	9	BC075842	BC075842 Homo sapi
14	386.2	73.7	476	9	AF245309	AF245309 Homo sapi
15	385.2	73.5	2674	6	AR242984	AR242984 Sequence
16	383.8	73.2	403	6	AR161374	AR161374 Sequence
17	383.8	73.2	403	6	AR369967	AR369967 Sequence
18	383.8	73.2	403	6	BD096601	BD096601 Transgeni
19	376.8	71.9	404	6	AR161372	AR161372 Sequence
20	376.8	71.9	404	6	AR369965	AR369965 Sequence
21	376.8	71.9	404	6	BD096599	BD096599 Transgeni
22	371.8	71.0	1581	9	AK130585	AK130585 Homo sapi
23	368.6	70.3	1589	9	AK130813	AK130813 Homo sapi
24	367	70.0	2013	9	AK058037	AK058037 Homo sapi
25	366.2	69.9	1431	6	E10697	E10697 cDNA encodi
26	366.2	69.9	1589	9	BC073773	BC073773 Homo sapi
27	363.6	69.4	829	6	BD059850	BD059850 Secreted
28	358.2	68.4	1765	6	E07334	E07334 cDNA sequen
29	358	68.3	1596	9	AK098516	AK098516 Homo sapi
30	357	68.1	472	9	AY393075	AY393075 Homo sapi
31	356.4	68.0	487	9	AY393076	AY393076 Homo sapi
32	354.8	67.7	1431	6	AR108867	AR108867 Sequence
33	354.8	67.7	1431	6	AR265201	AR265201 Sequence
34	354.8	67.7	1431	6	AR488223	AR488223 Sequence
35	353.2	67.4	1431	6	BD063039	BD063039 Identific
36	352.2	67.2	7528	6	AX080953	AX080953 Sequence
37	351.6	67.1	588	9	AF013622	AF013622 Homo sapi
38	349.2	66.6	475	9	AY393082	AY393082 Homo sapi
39	349	66.6	417	9	AF062158	AF062158 Homo sapi
40	347.6	66.3	420	9	AF062101	AF062101 Homo sapi
41	346.8	66.2	411	9	HST22X18	Z75392 H.sapiens m
42	346.4	66.1	426	9	HSA240590	AJ240590 Homo sapi
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44	345.2	65.9	432	9	HSA240580	AJ240580 Homo sapi
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ALIGNMENTS

RESULT 1

AR161428

LOCUS AR161428 524 bp DNA linear PAT 17-OCT-2001

DEFINITION Sequence 419 from patent US 6255458.

ACCESSION AR161428

VERSION AR161428.1 GI:16227305

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 524)
AUTHORS Lonberg,N. and Kay,R.M.
TITLE High affinity human antibodies and human antibodies against digoxin
JOURNAL Patent: US 6255458-A 419 03-JUL-2001;
FEATURES Location/Qualifiers
source 1. .524
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ORIGIN

Query Match 100.0%; Score 524; DB 6; Length 524;
Best Local Similarity 100.0%; Pred. No. 6.3e-131;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60

Qy 61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
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Qy 121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
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Qy 361 GTAATTAATTGGTTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
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Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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Db 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524

RESULT 2

AR369973
LOCUS AR369973 524 bp DNA linear PAT 12-SEP-2003
DEFINITION Sequence 219 from patent US 6300129.
ACCESSION AR369973
VERSION AR369973.1 GI:34606413

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KEYWORDS      .
SOURCE        Unknown.
ORGANISM      Unknown.
              Unclassified.
REFERENCE     1   (bases 1 to 524)
AUTHORS       Lonberg,N. and Kay,R.M.
TITLE         Transgenic non-human animals for producing heterologous antibodies
JOURNAL       Patent: US 6300129-A 219 09-OCT-2001;
FEATURES      Location/Qualifiers
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               /mol_type="genomic DNA"
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Query Match 100.0%; Score 524; DB 6; Length 524;
Best Local Similarity 100.0%; Pred. No. 6.3e-131;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db		1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTTCCTCCTCCTGGTGGCAGCTCCTAGATGG	60
Qy	61	GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC	120
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Qy	121	CTGTCCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
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Qy	421	ACCAAGGGCCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCCA	480
Db	421	ACCAAGGGCCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCCA	480
Qy	481	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	481	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524

RESULT 3
BD096607

LOCUS BD096607 524 bp DNA linear PAT 27-AUG-2002
 DEFINITION Transgenic non-human animals capable of producing heterologous antibodies.
 ACCESSION BD096607
 VERSION BD096607.1 GI:22642195
 KEYWORDS JP 2001527386-A/134.
 SOURCE unidentified
 ORGANISM unidentified
 unclassified.
 REFERENCE 1 (bases 1 to 524)
 AUTHORS Lonberg,N. and Kay,R.M.
 TITLE Transgenic non-human animals capable of producing heterologous antibodies
 JOURNAL Patent: JP 2001527386-A 134 25-DEC-2001;
 GENPHARM INTERNATIONAL
 COMMENT OS Unidentified
 PN JP 2001527386-A/134
 PD 25-DEC-2001
 PF 01-DEC-1997 JP 1998525687
 PR 02-DEC-1996 US 08/758417
 PI NILS LONBERG,ROBERT M KAY
 PC C12N5/00,C12N5/28,C12N5/24,C12N5/10,C07K16/00,A61K39/00 CC
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 CC Topology: Linear;
 CC Transgenic non-human animals capable of
 producing heterologous
 CC antibodies
 FH Key Location/Qualifiers
 FT source 1. .524
 FT /organism='Unidentified'.
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ORIGIN

Query Match 100.0%; Score 524; DB 6; Length 524;
 Best Local Similarity 100.0%; Pred. No. 6.3e-131;
 Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG	60
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Qy	61	GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC	120
Db	61	GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC	120
Qy	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Db	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Qy	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC	240
Db	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC	240

Qy 241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
 |||
 Db 241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300

Qy 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
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 Db 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360

Qy 361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
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 Db 361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420

Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 |||
 Db 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCTCCTCCAAGAGCACCTCTGGGGGCACA 480

Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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 Db 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524

RESULT 4

AR161427

LOCUS AR161427 4926 bp DNA linear PAT 17-OCT-2001

DEFINITION Sequence 418 from patent US 6255458.

ACCESSION AR161427

VERSION AR161427.1 GI:16227303

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 4926)

AUTHORS Lonberg,N. and Kay,R.M.

TITLE High affinity human antibodies and human antibodies against digoxin

JOURNAL Patent: US 6255458-A 418 03-JUL-2001;

FEATURES Location/Qualifiers

source 1..4926

/organism="unknown"

/mol_type="unassigned DNA"

ORIGIN

Query Match 100.0%; Score 524; DB 6; Length 4926;

Best Local Similarity 100.0%; Pred. No. 5.9e-131;

Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
 |||
 Db 16 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 75

Qy 61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
 |||
 Db 76 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 135

Qy 121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCCTTCAGTGGTTACTACTGGAGCTGGATC 180
 |||
 Db 136 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCCTTCAGTGGTTACTACTGGAGCTGGATC 195

Qy 181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGGAAGCACC 240
 |||
 Db 196 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGGAAGCACC 255

Qy 241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
 |||
 Db 256 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 315

Qy 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
 |||
 Db 316 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 375

Qy 361 GTAATTAATTGGTTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 420
 |||
 Db 376 GTAATTAATTGGTTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 435

Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 |||
 Db 436 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 495

Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||
 Db 496 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 539

RESULT 5

AR370022

LOCUS AR370022 4926 bp DNA linear PAT 12-SEP-2003

DEFINITION Sequence 268 from patent US 6300129.

ACCESSION AR370022

VERSION AR370022.1 GI:34606462

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 4926)

AUTHORS Lonberg,N. and Kay,R.M.

TITLE Transgenic non-human animals for producing heterologous antibodies

JOURNAL Patent: US 6300129-A 268 09-OCT-2001;

FEATURES Location/Qualifiers

source 1. .4926

/organism="unknown"

/mol_type="genomic DNA"

ORIGIN

Query Match 100.0%; Score 524; DB 6; Length 4926;

Best Local Similarity 100.0%; Pred. No. 5.9e-131;

Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
 |||
 Db 16 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 75

Qy 61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
 |||
 Db 76 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 135

Qy 121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
 |||
 Db 136 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 195
 |||
 Qy 181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 240
 |||
 Db 196 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 255
 |||
 Qy 241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
 |||
 Db 256 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 315
 |||
 Qy 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
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 Db 316 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 375
 |||
 Qy 361 GTAATTAATTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
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 Db 376 GTAATTAATTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 435
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 Qy 421 ACCAAGGGCCCATCGGTCCTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
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 Db 436 ACCAAGGGCCCATCGGTCCTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 495
 |||
 Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||
 Db 496 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 539
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RESULT 6

BD096656

LOCUS BD096656 4926 bp DNA linear PAT 27-AUG-2002

DEFINITION Transgenic non-human animals capable of producing heterologous antibodies.

ACCESSION BD096656

VERSION BD096656.1 GI:22642244

KEYWORDS JP 2001527386-A/183.

SOURCE unidentified

ORGANISM unidentified

unclassified.

REFERENCE 1 (bases 1 to 4926)

AUTHORS Lonberg,N. and Kay,R.M.

TITLE Transgenic non-human animals capable of producing heterologous antibodies

JOURNAL Patent: JP 2001527386-A 183 25-DEC-2001;

GENPHARM INTERNATIONAL

COMMENT OS Unidentified

PN JP 2001527386-A/183

PD 25-DEC-2001

PF 01-DEC-1997 JP 1998525687

PR 02-DEC-1996 US 08/758417

PI NILS LONBERG,ROBERT M KAY

PC C12N5/00,C12N5/28,C12N5/24,C12N5/10,C07K16/00,A61K39/00 CC

Strandedness: Single;

CC Topology: Linear;

CC Transgenic non-human animals capable of producing heterologous

VERSION BD000501.1 GI:18623614
 KEYWORDS JP 2000342279-A/1.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 1507)
 AUTHORS Kusunoki,C. and Fukushima,A.
 TITLE Process for producing monoclonal antibody
 JOURNAL Patent: JP 2000342279-A 1 12-DEC-2000;
 JAPAN TOBACCO INC,ABGENIX INC
 COMMENT OS Homo sapiens (human)
 PN JP 2000342279-A/1
 PD 12-DEC-2000
 PF 30-MAR-2000 JP 2000097874
 PR
 PI CHIHIRO KUSUNOKI,ATSUSHI FUKUSHIMA
 PC C12N15/09,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12N15/02, PC
 C12P21/08//
 PC C07K16/18,C12N15/00,C12N5/00,C12N15/00
 CC
 FH Key Location/Qualifiers
 FT CDS (12)..(1400).

FEATURES Location/Qualifiers
 source 1..1507
 /organism="Homo sapiens"
 /mol_type="genomic DNA"
 /db_xref="taxon:9606"

ORIGIN

Query Match 83.4%; Score 436.8; DB 6; Length 1507;
 Best Local Similarity 91.7%; Pred. No. 2.5e-107;
 Matches 475; Conservative 0; Mismatches 37; Indels 6; Gaps 1;

Qy	13	ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTGTCTCAG	72
Db	12	ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCCCAG	71
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	132
Db	72	GTTTCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	131
Qy	133	TGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	132	TGCGCTGTCTATGGTGGGTCCCTTCAGTGGTTACTACTGGACCTGGATCCGCCAGCCCCCA	191
Qy	193	GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGGAAGCACCAACTACAACCCG	252
Db	192	GGGAAGGGGCTGGAGTGGATTGGGGAAATCATTCATCATGGAAAACCAACTACAACCCG	251
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	252	TCCCTCAAGAGTCGAGTCTCCATATCAGTTGACACGTCCAAGAACCAGTTCTCCCTGACA	311
Qy	313	CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGA-----GAGTAATT	366
Db	312	CTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGGGGAGCAGTG	371

[illegible]

RESULT 8

BC073766

LOCUS BC073766 1581 bp mRNA linear PRI 30-JUN-2004

DEFINITION Homo sapiens cDNA clone MGC:88774 IMAGE:4855124, complete cds.

ACCESSION BC073766

VERSION BC073766.1 GI:49256426

KEYWORDS MGC.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1581)

AUTHORS Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G.,
Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D.,
Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,
Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F.,
Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L.,
Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L.,
Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S.,
Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J.,
Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J.,
McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S.,
Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W.,
Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,
Fahey,J., Helton,E., Kettelman,M., Madan,A., Rodrigues,S.,
Sanchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y.,
Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D.,
Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmutz,J., Myers,R.M.,
Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E.,
Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A.

TITLE	Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
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JOURNAL Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)

PUBMED 12477932

REFERENCE 2 (bases 1 to 1581)

AUTHORS Strausberg, R.

TITLE Direct Submission

JOURNAL Submitted (23-JUN-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA

REMARK NIH-MGC Project URL: <http://mgc.nci.nih.gov>

COMMENT Contact: MGC help desk

Db	138	ACCTGCACTGTCTCTGGAGGCTCCATCAGTGGTTACTACTGGAGCTGGATCCCGCAGCCC	197
Qy	190	CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAAC 	249
Db	198	GCCGGGAAGGGACTGGAGTGGATTGGGCGTATCTATAACCAGTGGGAGCACCAACTACAAC	257
Qy	250	CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG 	309
Db	258	CCCTCCCTCAAGAGTCGAGTCACCATGT CAGTAGACACGTCCAAGAACCAGTTCTCCCTG	317
Qy	310	AAACTGAGCTCTGTGACCGCTGCCGACACGGCTGTGTATTACTGTGCGAGAG---TAATT	366
Db	318	AAGCTGAGCTCTGTGACCGCCGCGGACACGGCCGTGTATTACTGTGCGAGAGGTTCGGTTC	377
Qy	367	AATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAG 	426
Db	378	ACCTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCCACCAAG	437
Qy	427	GGCCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCC 	486
Db	438	GGCCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCC	497
Qy	487	CTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	498	CTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	535

CC Incyte clone 2849752
 FH Key Location/Qualifiers
 FT source 1. .1634
 FT /organism='Homo sapiens (human)'.
 FT

FEATURES Location/Qualifiers
 source 1. .1634
 /organism="Homo sapiens"
 /mol_type="genomic DNA"
 /db_xref="taxon:9606"

ORIGIN

Query Match 76.1%; Score 399; DB 6; Length 1634;
 Best Local Similarity 86.3%; Pred. No. 4.3e-97;
 Matches 460; Conservative 0; Mismatches 55; Indels 18; Gaps 1;

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Qy      10 ACCATGAAACACCTGTGGTTCTTCCTCCTCGGTGGCAGCTCCTAGATGGGTCCTGTCT 69
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      75 AACATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCC 134

Qy      70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
      | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     135 CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTC 194

Qy     130 ACCTGCGCTGTCTATGGTGGTTCCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
      | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     195 ACCTGCACTGTCTCTGGTGGCTCCATCAGGAGTTACTACTGGAAGTGGATCCGGCTGCCC 254

Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAAC 249
      | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     255 CCAGGGAAGGGACTGGAGTGGATTGGGTATATCTATACTAGTGGGAGCACCAACTACAAC 314

Qy     250 CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG 309
      | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     315 CCCTCCCTCAAGAGTCGAGTCACCATGTCTAGTAGACACGTCCAAGAACCAGTTCTCCCTG 374

Qy     310 AAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA----- 360
      | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     375 AAGCTGAGCTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGACCCCGCCC 434

Qy     361 -----GTAATTAATTGGTTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCC 411
      | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     435 AACGCTACTACTACTACGGTATGGACTTCTGGGGCCAAGGGAGCCCTGGTCACCGTCTCC 494

Qy     412 TCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCT 471
      | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     495 TCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCT 554

Qy     472 GGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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Db     555 GGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 607
  
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RESULT 10
 A49389
 LOCUS A49389 1418 bp DNA linear PAT 07-MAR-1997
 DEFINITION Sequence 7 from Patent W09607740.
 ACCESSION A49389

VERSION A49389.1 GI:2302866
 KEYWORDS .
 SOURCE unidentified
 ORGANISM unidentified
 unclassified.
 REFERENCE 1 (bases 1 to 1418)
 AUTHORS Edelman,L., Margaritte,C., Kaczorek,M. and Chaabihi,H.
 TITLE MONOCLONAL RECOMBINANT ANTI-RHESUS D (D7C2) ANTIBODY
 JOURNAL Patent: WO 9607740-A 7 14-MAR-1996;
 PASTEUR INSTITUT (FR)
 COMMENT Other publication FR 2724182 960308.
 FEATURES Location/Qualifiers
 source 1. .1418
 /organism="unidentified"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32644"
 CDS 1. .>1418
 /note="unnamed protein product"
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 /db_xref="GI:2302867"
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 SVTAADTAVYYCARAPEYKWKYHGDWFDPPWGQGTTVTVSSASTKGPSVFPLAPSSKST
 SGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSVVTVPSSSL
 GTQTYICNVNHKPSNTKVDKKAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTL
 MISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLKVL
 HQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC
 LVKGFYPDSIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFS
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 sig_peptide 1. .57
 mat_peptide 58. .1418
 /product="IMMUNOGLOBULIN, HEAVY CHAIN"

ORIGIN

Query Match 75.8%; Score 397.2; DB 6; Length 1418;
 Best Local Similarity 87.2%; Pred. No. 1.3e-96;
 Matches 457; Conservative 0; Mismatches 43; Indels 24; Gaps 1;

Qy	25	TGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAGGTGCAGCTACAG	84
Db	13	TGTATCATCTCTTCTTGGTAGCAACAGCTACAGGTGTCCACTCCCAGGTCCAAGTGCAG	72
Qy	85	CAGTGGGGCGCAGGACTGTTGAAGCCTTCGAGACCCTGTCCCTCACCTGCGCTGTCTAT	144
Db	73	CAGTGGGGCGCAGGACTGTTGAAGCCTTCGAGACCCTGTCCCTCACCTGCACTGTCTAT	132
Qy	145	GGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCAGGTAAGGGTCTG	204
Db	133	GGTGGGTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCCCAGGGAAGGGGCTG	192
Qy	205	GAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCGTCTCTCAAGAGT	264
Db	193	GAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAACCCGTCCCTCAAGAGT	252
Qy	265	CGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAACTGAGCTCTGTG	324

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Db      253 CGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAACTGAACTCTGTG 312
Qy      325 ACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAG----- 361
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Db      313 ACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGGGCCCCAGAGTATAAATGGAAGTAT 372
Qy      362 -TAATTAATTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
        | ||||||||| ||||||| || ||| |||||||||||||||||
Db      373 CATGGGGACTGGTTCGACCCCTGGGGCCAAGGTACCACTGTACCGTCTCCTCAGCCTCC 432
Qy      421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
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Db      433 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 492
Qy      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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RESULT 11

AR176296

LOCUS AR176296 1418 bp DNA linear PAT 17-DEC-2001

DEFINITION Sequence 7 from patent US 6312690.

ACCESSION AR176296

VERSION AR176296.1 GI:17918651

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 1418)

AUTHORS Edelman,L., Margaritte,C., Kaczorek,M. and Chaabihi,H.

TITLE Monoclonal recombinant anti-rhesus D (D7C2) antibody

JOURNAL Patent: US 6312690-A 7 06-NOV-2001;

FEATURES Location/Qualifiers

source 1..1418

/organism="unknown"

/mol_type="unassigned DNA"

ORIGIN

Query Match 75.5%; Score 395.6; DB 6; Length 1418;

Best Local Similarity 87.0%; Pred. No. 3.6e-96;

Matches 456; Conservative 0; Mismatches 44; Indels 24; Gaps 1;

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Qy      25 TGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAGGTGCAGCTACAG 84
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Db      13 TGTATCATCCTCTTCTTGGTAGCAACAGCTACAGGTGTCCACTCCCAGGTCCAAGTGGAG 72
Qy      85 CAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTAT 144
        ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db      73 CAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTAT 132
Qy      145 GGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCAGGTAAGGGTCTG 204
        ||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db      133 GGTGGGTCCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCCCAGGGAAGGGGCTG 192
Qy      205 GAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCGTCTCTCAAGAGT 264
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Db 193 GAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAACCCGTCCCTCAAGAGT 252

Qy 265 CGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAACTGAGCTCTGTG 324
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Db 253 CGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAACTGAACTCTGTG 312

Qy 325 ACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAG----- 361
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Db 313 ACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGGGCCCCAGAGTATAAATGGAAGTAT 372

Qy 362 -TAATTAATTGGTTTCGACCCTTGGGGCCAGGGAACCCTGGTCAACCGTCTCCTCAGCCTCA 420
 | ||||||| ||||||| || ||| |||||||

Db 373 CATGGGGACTGGTTTCGACCCTTGGGGCCAAGGTACCACTGTCAACCGTCTCCTCAGCCTCC 432

Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCTCCAAGAGCACCTCTGGGGGCACA 480
 |||||||||||||||||||||||||||||||||||||||||||||||||||

Db 433 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCTCCAAGAGCACCTCTGGGGGCACA 492

Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||||||||||||||||||||||||||||||||||||||

Db 493 GCGGCCCTGGGCTGCC'TGGTCAAGGACTACTTCCCCGAACCGGT 536

RESULT 12

AR135359

LOCUS AR135359 1567 bp DNA linear PAT 16-JUN-2001

DEFINITION Sequence 17 from patent US 6135941.

ACCESSION AR135359

VERSION AR135359.1 GI:14476031

KEYWORDS :

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 1567)

AUTHORS Hillman,J.L., Lal,P., Tang,Y.Tom., Yue,H., Au-Young,J., Corley,N.C., Guegler,K.J. and Baughn,M.R.

TITLE Human immune system associated molecules

JOURNAL Patent: US 6135941-A 17 24-OCT-2000;

FEATURES Location/Qualifiers

source 1..1567

/organism="unknown"

/mol_type="unassigned DNA"

ORIGIN

Query Match 75.0%; Score 392.8; DB 6; Length 1567;

Best Local Similarity 86.3%; Pred. No. 2.1e-95;

Matches 468; Conservative 0; Mismatches 47; Indels 27; Gaps 2;

Qy 10 ACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT 69
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Db 75 AACATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCAGATGGGTCCTGTCC 134

Qy 70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
 ||||||||| || ||| ||||| ||||||| |||||||

Db 135 CAGGTGCAGCTGCAGGAGTCGGGGCCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 194

Qy 130 ACCTGCGCTGTCTATGGTGGTTTCCTTCA-----GTGGTTACTACTGGAGCTGGATCCGC 183

Db	195	ACCTGCGCTGTCTCTGGTGGCTCCATCACTAGTGGTGGTTACTACTGGAGCTGGATCCGC	254
Qy	184	CAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAAC	243
Db	255	CAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGTACATCTATTACAGTGGGAGCACCCCTC	314
Qy	244	TACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTC	303
Db	315	TACAACCCGTCCCTCAAGAGTCGAGTTACCATATCAGTAGACACGTCCAAGAACCAGTTC	374
Qy	304	TCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA---	360
Db	375	TCCCTGAAGCTGAGCTCTGTGACTGCCGCAGACACGGCCGTGTATTACTGTGCCAGAGAT	434
Qy	361	-----GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGGTC	402
Db	435	GACGTAGGTTTAAGGGGGGGAACCTACGGTATGGACGTCTGGGGCCAGGGAACCCTGGGTC	494
Qy	403	ACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG	462
Db	495	ACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG	554
Qy	463	AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG	522
Db	555	AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG	614
Qy	523	GT	524
Db	615	GT	616

RESULT 13

BC075842

LOCUS BC075842 1599 bp mRNA linear PRI 07-JUL-2004

DEFINITION Homo sapiens immunoglobulin heavy constant gamma 1 (G1m marker), mRNA (cDNA clone MGC:88778 IMAGE:6215815), complete cds.

ACCESSION BC075842

VERSION BC075842.1 GI:49904193

KEYWORDS MGC.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1599)

AUTHORS Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G., Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D., Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K., Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F., Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L., Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L., Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S., Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J., Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J., McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S., Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W., Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,

Fahey, J., Helton, E., Kettelman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D., Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnierch, A., Schein, J.E., Jones, S.J. and Marra, M.A.

TITLE Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences

JOURNAL Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)

PUBMED 12477932

REFERENCE 2 (bases 1 to 1599)

AUTHORS Strausberg, R.

TITLE Direct Submission

JOURNAL Submitted (06-JUL-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA

REMARK NIH-MGC Project URL: <http://mgc.nci.nih.gov>

COMMENT Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Mark Watson
cDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome Center, Stanford University School of Medicine, Stanford, CA 94305
Web site: <http://www-shgc.stanford.edu>
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriguez, A., and Myers, R. M.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
Series: IRAL Plate: 58 Row: j Column: 19
This clone was selected for full length sequencing because it passed the following selection criteria: GenomeScan gene prediction, Similarity but not identity to protein.

FEATURES Location/Qualifiers

source 1..1599
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="MGC:88778 IMAGE:6215815"
/tissue_type="Spleen"
/clone_lib="NIH_MGC_113"
/lab_host="DH10B-R"
/note="Vector: pOTB7"

gene 1..1599
/gene="IGHG1"
/db_xref="IMGT/LIGM:IGHG1"
/db_xref="LocusID:3500"
/db_xref="MIM:147100"

CDS 23..1432
/gene="IGHG1"
/codon_start=1
/product="IGHG1 protein"
/protein_id="AAH75842.1"
/db_xref="GI:49904194"

LOCUS AF245309 476 bp mRNA linear PRI 15-MAR-2001
 DEFINITION Homo sapiens IgG1 immunoglobulin heavy chain variable region mRNA, partial cds.
 ACCESSION AF245309
 VERSION AF245309.2 GI:13347044
 KEYWORDS .
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 476)
 AUTHORS Ottensmeier, C.H. and Stevenson, F.K.
 TITLE Isotype switch variants reveal clonally related subpopulations in diffuse large B-cell lymphoma
 JOURNAL Blood 96 (7), 2550-2556 (2000)
 MEDLINE 20458802
 PUBMED 11001910
 REFERENCE 2 (bases 1 to 476)
 AUTHORS Ottensmeier, C.H. and Stevenson, F.K.
 TITLE Direct Submission
 JOURNAL Submitted (15-MAR-2000) Molecular Immunology, Cancer Sciences Division, Southampton University, Tremona Road, Southampton SO16 6YD, UK
 COMMENT On Mar 15, 2001 this sequence version replaced gi:13123497.
 FEATURES
 Location/Qualifiers
 source 1..476
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /chromosome="14"
 /tissue_type="diffuse large B cell lymphoma"
 /note="Case 5049"
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 /codon_start=1
 /product="IgG1 immunoglobulin heavy chain variable region"
 /protein_id="AAK19936.1"
 /db_xref="GI:13347045"
 /translation="QVQLQQWGAGLLKPSETLSRTCAVYGGSFSDDYWSWIRQPPGKG LEWIGEINHSGSTNYNPSLKSRTVISVDVTSEKQFSLKLSSVTAADTAVYYCARRNDWY PFDYWDEGILVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSW"

ORIGIN

Query Match 73.7%; Score 386.2; DB 9; Length 476;
 Best Local Similarity 91.5%; Pred. No. 1.3e-93;
 Matches 422; Conservative 0; Mismatches 33; Indels 6; Gaps 1;

Qy 70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
 |||||
 Db 1 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCGC 60
 Qy 130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
 |||||
 Db 61 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGTGACTACTGGAGCTGGATTCGCCAGCCC 120
 Qy 190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAAC 249
 |||||
 Db 121 CCAGGGAAGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGTACCAACTACAAC 180

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_23Sep04:*
1: geneseqn1980s:*
2: geneseqn1990s:*
3: geneseqn2000s:*
4: geneseqn2001as:*
5: geneseqn2001bs:*
6: geneseqn2002as:*
7: geneseqn2002bs:*
8: geneseqn2003as:*
9: geneseqn2003bs:*
10: geneseqn2003cs:*
11: geneseqn2003ds:*
12: geneseqn2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	%		Query		DB	ID	Description
	Score	Match	Length				
1	524	100.0	524	2	AAT73444	Aat73444 Human imm	
2	524	100.0	524	2	AAV39292	Aav39292 Synthetic	
3	524	100.0	524	2	AAZ22046	Aaz22046 Nucleotid	
4	524	100.0	4926	2	AAV39291	Aav39291 Plasmid p	
5	524	100.0	4926	2	AAZ22045	Aaz22045 Nucleotid	
6	436.8	83.4	1507	3	AAA09695	Aaa09695 Human imm	
7	407.2	77.7	1401	10	ADE28478	Ade28478 Human ant	
8	405.6	77.4	629	6	ABQ56276	Abq56276 Human ova	
9	404	77.1	1401	10	ADE28470	Ade28470 Human ant	
10	399	76.1	1634	3	AAZ50012	Aaz50012 Human imm	
11	397.6	75.9	1401	10	ADE28418	Ade28418 Human ant	
12	397.2	75.8	1418	2	AAT26889	Aat26889 Anti-rhes	
13	396.8	75.7	1838	10	ADF90705	Adf90705 Human hep	
14	392.8	75.0	1567	4	AAC66522	Aac66522 Human imm	
15	392.4	74.9	1395	10	ADE28410	Ade28410 Human ant	
16	385.2	73.5	669	10	ADJ32111	Adj32111 Human int	
17	385.2	73.5	2674	8	ABX15391	Abx15391 Human IgG	
18	383.8	73.2	403	2	AAT73440	Aat73440 Human imm	
19	383.8	73.2	403	2	AAV39238	Aav39238 Functiona	
20	380.4	72.6	2674	10	AAD59472	Aad59472 RecPolRhD	
21	376.8	71.9	404	2	AAT73438	Aat73438 Human imm	
22	376.8	71.9	404	2	AAV39236	Aav39236 Functiona	
23	376.8	71.9	404	2	AAZ21990	Aaz21990 Partial n	
c 24	376.6	71.9	2166	12	ADF69266	Adf69266 Human lun	
25	369.8	70.6	401	2	AAZ21992	Aaz21992 Partial n	
26	367.8	70.2	687	10	ADJ32127	Adj32127 Human int	
27	366.2	69.9	1431	2	AAT18059	Aat18059 Monoclonal	
28	365.8	69.8	690	10	ADJ32117	Adj32117 Human int	
29	365.6	69.8	462	8	ABZ80006	Abz80006 Human ant	
30	363.6	69.4	829	2	AAV87732	Aav87732 EST clone	

31	361.4	69.0	1765	2	AAQ71873	Aaq71873 Sequence
32	357.2	68.2	496	2	AAZ24416	Aaz24416 Human bla
33	355.6	67.9	663	10	ADJ32125	Adj32125 Human int
34	354.8	67.7	1431	2	AAT62513	Aat62513 Primatise
35	354.8	67.7	1431	2	AAV35489	Aav35489 Macaque p
36	354.8	67.7	1431	6	AAS17247	Aas17247 DNA seque
37	354.8	67.7	1431	10	AAD56531	Aad56531 Monkey 16
38	353.4	67.4	1539	6	ABK34949	Abk34949 Human cDN
39	352.2	67.2	7528	4	AAF30316	Aaf30316 Bicistron
40	342.4	65.3	1404	2	AAT62868	Aat62868 Human gam
41	342.4	65.3	1404	10	ADE31588	Ade31588 Gamma 4 h
42	342	65.3	1431	2	AAT62510	Aat62510 Primatise
43	342	65.3	1431	2	AAV35485	Aav35485 Macaque p
44	342	65.3	1431	6	AAS17243	Aas17243 DNA seque
45	342	65.3	1431	10	AAD56527	Aad56527 Monkey 7C

ALIGNMENTS

RESULT 1

AAT73444

ID AAT73444 standard; DNA; 524 BP.

XX

AC AAT73444;

XX

DT 03-DEC-1997 (first entry)

XX

DE Human immunoglobulin light chain variable region partial transcript.

XX

KW Ig; affinity constant; human; antigen; hybridoma; B cell; transgene;

KW transgenic; mouse; CD4; antibody; autoimmune; inflammatory;

KW transplant rejection; ss.

XX

OS Homo sapiens.

XX

PN WO9713852-A1.

XX

PD 17-APR-1997.

XX

PF 10-OCT-1996; 96WO-US016433.

XX

PR 10-OCT-1995; 95US-00544404.

XX

PA (GENP-) GENPHARM INT INC.

XX

PI Lonberg N, Kay RM;

XX

DR WPI; 1997-235888/21.

XX

PT Novel anti-CD4 antibody produced by transgenic mice - used in the

PT treatment of auto-immune disease etc.

XX

PS Claim 45; Page 272; 396pp; English.

XX

CC A novel composition has been developed which comprises an immunoglobulin

CC (Ig) having an affinity constant (Ka) of at least 2 multiply 1000000000 M

AAV39292

ID AAV39292 standard; DNA; 524 BP.

XX

AC AAV39292;

XX

DT 18-DEC-1998 (first entry)

XX

DE Synthetic heavy chain sequence HC6G5.

XX

KW Transgenic animal; human heterologous antibody; transgene;
KW isotype switching; neutrophil efflux; reperfusion injury; CD4 binding;
KW autoimmune reaction; inflammatory response; transplant rejection;
KW acid induced lung injury; acute adult respiratory distress syndrome;
KW ARDS; vasculitis; septic shock; allergic reaction; asthma;
KW cystic fibrosis; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN WO9824884-A1.

XX

PD 11-JUN-1998.

XX

PF 01-DEC-1997; 97WO-US021803.

XX

PR 02-DEC-1996; 96US-00758417.

XX

PA (GENP-) GENPHARM INT.

XX

PI Lonberg N, Kay RM;

XX

DR WPI; 1998-333306/29.

XX

PT Hybridoma producing antibody specific for interleukin-8 - used to prevent
PT efflux of neutrophils from vasculature, and treat reperfusion injury.

XX

PS Example 42; Page 324; 452pp; English.

XX

CC The present sequence represents a synthetic heavy sequence (created using
CC oligonucleotides AAV39279-89). This synthetic sequence differs from
CC natural sequences in that strings of repeated oligonucleotides are
CC interrupted (to facilitate oligonucleotide synthesis and PCR
CC amplification), optimal translation initiation sites are incorporated and
CC HindII sites were engineered upstream of the translation initiation
CC sites. The sequence is used to make plasmid pHC6G5, which is used in the
CC construction of minigenes for expression of IgGkappa anti-CD4 antibodies,
CC in the transgenic mouse of the invention. The specification describes
CC transgenic non-human animals, especially a mouse, which are capable of
CC producing a human heterologous antibodies of multiple isotypes by
CC undergoing isotype switching. The transgenic animals have human heavy and
CC light chain transgenes. The transgenes are capable of functionally
CC rearranging a heterologous diversity (D) gene in a variable-diversity-
CC junction (V-D-J) recombination. The transgenes include a heavy chain
CC transgene comprising at least one V, D and J gene segment, and one
CC constant region gene segment. The immunoglobulin (Ig) light chain
CC transgene comprises at least one V and J gene segment and one constant
CC region gene segment. The gene segments are heterologous to the transgenic

CC animal. The antibody can be used to prevent efflux of neutrophils from
CC vasculature. It can also be used to treat reperfusion injury. CD4 binding
CC antibodies are used to reduce undesirable autoimmune reactions,
CC inflammatory responses and rejection of transplanted organs. The anti-IL-
CC 8 antibodies can reduce tissue damage and prolong survival in animal
CC models of acute adult respiratory distress syndrome (ARDS) and acid
CC induced lung injury. The anti-IL-8 antibodies can also be used for the
CC treatment of vasculitis, septic shock, allergic reactions (e.g. asthma)
CC and cystic fibrosis

XX

SQ Sequence 524 BP; 106 A; 160 C; 140 G; 118 T; 0 U; 0 Other;

Query Match 100.0%; Score 524; DB 2; Length 524;
Best Local Similarity 100.0%; Pred. No. 7.7e-132;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
      |||
Db      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60

Qy     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
      |||
Db     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120

Qy    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
      |||
Db    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180

Qy    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240
      |||
Db    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240

Qy    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
      |||
Db    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300

Qy    301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
      |||
Db    301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360

Qy    361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
      |||
Db    361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420

Qy    421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
      |||
Db    421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACA 480

Qy    481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
      |||
Db    481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
```

RESULT 3

AAZ22046

ID AAZ22046 standard; DNA; 524 BP.

XX

AC AAZ22046;
 XX
 DT 24-NOV-1999 (first entry)
 XX
 DE Nucleotide sequence of HC6G5.
 XX
 KW Transgenic animal; heterologous antibody; hybridoma; B cell;
 KW transgenic mouse; human heavy chain transgene; digoxin;
 KW human light chain transgene; immortalized cell; immunoglobulin;
 KW Shinga-like toxin; autoimmune disease; cancer; infectious disease;
 KW transplant rejection; blood disorder; coagulation disorder; ss.
 XX
 OS Synthetic.
 XX
 PN WO9945962-A1.
 XX
 PD 16-SEP-1999.
 XX
 PF 12-MAR-1999; 99WO-US005535.
 XX
 PR 13-MAR-1998; 98US-00042353.
 XX
 PA (GENP-) GENPHARM INT INC.
 XX
 PI Lonberg N, Fishwild DM, Ball WJ;
 XX
 DR WPI; 1999-551219/46.
 XX
 PT Novel transgenic non-human animals used to produce heterologous
 PT antibodies.
 XX
 PS Example 42; Page 325; 484pp; English.
 XX
 CC The specification describes transgenic animals that are capable of
 CC producing a heterologous antibody. The antibodies are isolated from a
 CC hybridoma, comprising B cells, that is obtained from a transgenic mouse
 CC having a genome comprising a human heavy chain transgene and a human
 CC light chain transgene. The B cells are fused to immortalized cells
 CC suitable for generating a hybridoma, which produces a detectable amount
 CC of an immunoglobulin that specifically binds digoxin or Shinga-like
 CC toxin. B cells from transgenic animals can be used to generate hybridomas
 CC expressing monoclonal high affinity human sequence antibodies. Antibodies
 CC produced from the transgenic animals of the invention can be used to
 CC treat human diseases, e.g. autoimmune diseases, cancer, infectious
 CC disease, transplant rejection, blood disorders such as coagulation
 CC disorders and other diseases. The present sequence is used in the course
 CC of the invention
 XX
 SQ Sequence 524 BP; 106 A; 160 C; 140 G; 118 T; 0 U; 0 Other;

Query Match 100.0%; Score 524; DB 2; Length 524;
 Best Local Similarity 100.0%; Pred. No. 7.7e-132;
 Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60

Qy	61	GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC	120
Db	61	GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC	120
Qy	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Db	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Qy	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC	240
Db	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC	240
Qy	241	AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG	300
Db	241	AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG	300
Qy	301	TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA	360
Db	301	TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA	360
Qy	361	GTAATTAATTGGTTCGACCCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA	420
Db	361	GTAATTAATTGGTTCGACCCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA	420
Qy	421	ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA	480
Db	421	ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA	480
Qy	481	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	481	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524

RESULT 4

AAV39291

ID AAV39291 standard; DNA; 4926 BP.

XX

AC AAV39291;

XX

DT 18-DEC-1998 (first entry)

XX

DE Plasmid pHCG5 nucleotide sequence.

XX

KW Transgenic animal; human heterologous antibody; transgene;
 KW isotype switching; neutrophil efflux; reperfusion injury; CD4 binding;
 KW autoimmune reaction; inflammatory response; transplant rejection;
 KW acid induced lung injury; acute adult respiratory distress syndrome;
 KW ARDS; vasculitis; septic shock; allergic reaction; asthma;
 KW cystic fibrosis; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN W09824884-A1.

XX

PD 11-JUN-1998.

Qy	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Db	136	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	195
Qy	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC	240
Db	196	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC	255
Qy	241	AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG	300
Db	256	AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG	315
Qy	301	TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA	360
Db	316	TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA	375
Qy	361	GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA	420
Db	376	GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA	435
Qy	421	ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACA	480
Db	436	ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACA	495
Qy	481	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	496	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	539

RESULT 5

AAZ22045

ID AAZ22045 standard; DNA; 4926 BP.

XX

AC AAZ22045;

XX

DT 24-NOV-1999 (first entry)

XX

DE Nucleotide sequence of plasmid pHC6G5.

XX

KW Transgenic animal; heterologous antibody; hybridoma; B cell;

KW transgenic mouse; human heavy chain transgene; digoxin;

KW human light chain transgene; immortalized cell; immunoglobulin;

KW Shinga-like toxin; autoimmune disease; cancer; infectious disease;

KW transplant rejection; blood disorder; coagulation disorder; ss.

XX

OS Synthetic.

XX

PN WO9945962-A1.

XX

PD 16-SEP-1999.

XX

PF 12-MAR-1999; 99WO-US005535.

XX

PR 13-MAR-1998; 98US-00042353.

XX

PA (GENP-) GENPHARM INT INC.

XX
PI Lonberg N, Fishwild DM, Ball WJ;
XX
DR WPI; 1999-551219/46.
XX
PT Novel transgenic non-human animals used to produce heterologous
PT antibodies.
XX
PS Example 42; Page 322-325; 484pp; English.
XX
CC The specification describes transgenic animals that are capable of
CC producing a heterologous antibody. The antibodies are isolated from a
CC hybridoma, comprising B cells, that is obtained from a transgenic mouse
CC having a genome comprising a human heavy chain transgene and a human
CC light chain transgene. The B cells are fused to immortalized cells
CC suitable for generating a hybridoma, which produces a detectable amount
CC of an immunoglobulin that specifically binds digoxin or Shinga-like
CC toxin. B cells from transgenic animals can be used to generate hybridomas
CC expressing monoclonal high affinity human sequence antibodies. Antibodies
CC produced from the transgenic animals of the invention can be used to
CC treat human diseases, e.g. autoimmune diseases, cancer, infectious
CC disease, transplant rejection, blood disorders such as coagulation
CC disorders and other diseases. The present sequence is used in the course
CC of the invention
XX
SQ Sequence 4926 BP; 1121 A; 1455 C; 1296 G; 1054 T; 0 U; 0 Other;

Db 376 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 435

Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db 436 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 495

Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 ||||||||||||||||||||||||||||||||||||||||||||||

Db 496 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 539

RESULT 6

AAA09695

ID AAA09695 standard; cDNA; 1507 BP.

XX

AC AAA09695;

XX

DT 01-FEB-2001 (first entry)

XX

DE Human immunoglobulin heavy chain cDNA sequence.

XX

KW Monoclonal antibody; immunoglobulin heavy chain; human; ss.

XX

OS Homo sapiens.

XX

PN WO200058499-A1.

XX

PD 05-OCT-2000.

XX

PF 30-MAR-2000; 2000WO-JP002022.

XX

PR 30-MAR-1999; 99JP-00087929.

XX

PA (NISB) JAPAN TOBACCO INC.

PA (ABGE-) ABGENIX INC.

XX

PI Kusunoki C, Fukushima A;

XX

DR WPI; 2000-611721/58.

DR P-PSDB; AAB26884.

XX

PT Transformation of a hybridoma with a gene encoding an immunoglobulin heavy chain polypeptide for enhanced production of monoclonal antibody.

XX

PS Example 2; Page 35-39; 48pp; Japanese.

XX

CC This invention relates to a method for the production of a monoclonal antibody. The antibody is produced by inserting a gene encoding an immunoglobulin heavy chain polypeptide into cells which produce a monoclonal antibody recognizing the immunoglobulin, and culturing the transformant to express the antibody. The invention also includes monoclonal antibody-expressing cells transformed by the method; and transgenic non-human animals containing the cells and expressing a human antibody. The method results in the enhanced expression of a monoclonal antibody for diagnostic and therapeutic use. The present sequence represents a human immunoglobulin heavy chain cDNA sequence used in an example of the method of the invention

XX

SQ Sequence 1507 BP; 330 A; 498 C; 409 G; 270 T; 0 U; 0 Other;

Query Match 83.4%; Score 436.8; DB 3; Length 1507;
Best Local Similarity 91.7%; Pred. No. 4.2e-108;
Matches 475; Conservative 0; Mismatches 37; Indels 6; Gaps 1;

```
Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      12 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 71

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      72 GTTCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 131

Qy     133 TGCCTGTCTATGGTGGTTCTTCCTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     132 TGCCTGTCTATGGTGGGTCCTTCAGTGGTTACTACTGGACCTGGATCCGCCAGCCCCCA 191

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
        || ||||| ||||||||||||||| ||||| ||||| |||||||||||||||
Db     192 GGGAAGGGGCTGGAGTGGATTGGGGAAATCATTATCATGAAACACCAACTACAACCCG 251

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
        || ||||||||||||||| ||||||||||| ||||||||||| ||||| |||||
Db     252 TCCCTCAAGAGTCGAGTCTCCATATCAGTTGACACGTCCAAGAACCAGTTCTCCCTGACA 311

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGA-----GAGTAATT 366
        ||||||||||||||| ||||||||||| ||||||||||| ||||| |||||
Db     312 CTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGGGGAGCAGTG 371

Qy     367 AATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCAACCAAG 426
        | ||| ||| ||||||||||||||| ||||||||||| |||||||||||
Db     372 GCTGCGTTTGACTACTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCCACCAAG 431

Qy     427 GGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCC 486
        ||||||||||||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     432 GGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAGAGCACAGCGGCC 491

Qy     487 CTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
        ||||||||||||||| ||||||||||| |||||||||||
Db     492 CTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 529
```

RESULT 7

ADE28478

ID ADE28478 standard; cDNA; 1401 BP.

XX

AC ADE28478;

XX

DT 29-JAN-2004 (first entry)

XX

DE Human anti-CD40 antibody 24-2-1 full length heavy chain cDNA.

XX

KW anti-CD40 monoclonal antibody; CD40; cytostatic; virucide; antibacterial;

KW immunostimulant; anti-HIV; hyperproliferative; cancer; viral;

KW bacterial infection; immunodeficiency; neutropenia; HIV; gene therapy;

KW human; heavy chain; ss; gene; 24-2-1.
 XX
 OS Homo sapiens.
 XX
 PN WO2003040170-A2.
 XX
 PD 15-MAY-2003.
 XX
 PF 08-NOV-2002; 2002WO-US036107.
 XX
 PR 09-NOV-2001; 2001US-0348980P.
 XX
 PA (PFIZ) PFIZER PROD INC.
 PA (ABGE-) ABGENIX INC.
 XX
 PI Bedian V, Gladue RP, Corvalan J, Jia X, Feng X;
 XX
 DR WPI; 2003-441521/41.
 DR P-PSDB; ADE28479.
 XX
 PT New chimeric or human monoclonal antibody or its antigen-binding portion
 PT that specifically binds to and activates human CD40, useful for enhancing
 PT an immune response in a human, or treating cancer, HIV, neutropenia or
 PT viral infections.
 XX
 PS Claim 24; SEQ ID NO 85; 177pp; English.
 XX
 CC The invention relates to a novel chimeric or human monoclonal antibody or
 CC its antigen-binding portion that specifically binds to and activates
 CC human CD40. The anti-CD40 antibody of the invention demonstrates
 CC cytostatic, virucide, antibacterial, immunostimulant and anti-HIV
 CC activities and may be useful for treating a hyperproliferative disorder
 CC such as cancer, viral and bacterial infection or genetic, primary or
 CC combined immunodeficiency conditions including neutropenia or HIV
 CC infection. The anti-CD40 antibodies may also be useful for detecting CD40
 CC in a biological sample in vitro or in vivo, as well as during gene
 CC therapy procedures. The current sequence is that of the human anti-CD40
 CC antibody full length heavy chain cDNA of the invention.
 XX
 SQ Sequence 1401 BP; 310 A; 460 C; 382 G; 249 T; 0 U; 0 Other;

Query Match 77.7%; Score 407.2; DB 10; Length 1401;
Best Local Similarity 87.5%; Pred. No. 4.3e-100;
Matches 464; Conservative 0; Mismatches 48; Indels 18; Gaps 1;

Qy	13	ATGAAACACCTGTGGTTCTTCCTCCTCGGTGGCAGCTCCTAGATGGGTCCGTCTCAG	72
Db	1	ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCCGTCCCAG	60
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCAC	132
Db	61	GTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCAC	120
Qy	133	TGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	121	TGCACTGTCTCTGGTGGCTCCATCAGAGGTTACTACTGGAGCTGGATCCGGCAGCCCCCA	180

Qy	193	GGAAGGGTCTGGAGTGATTGGTGAAATCAATCATAGTGGGAGCACCACACTACAACCCG	252
Db	181	GGGAAGGGACTGGAGTGATTGGGTATATCTATTACAGTGGGAGCACCAACTACAACCCC	240
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	241	TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG	300
Qy	313	CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA-----	360
Db	301	CTGAGTTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAAGGGGGGGCCTC	360
Qy	361	-----GTAATTAATTGGTTCGACCCTTGGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCA	414
Db	361	TACGGTGACTACGGCTGGTTCGCCCCCTGGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCA	420
Qy	415	GCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGG	474
Db	421	GCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG	480
Qy	475	GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	481	AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	530

PA (HUMA-) HUMAN GENOME SCI INC.

XX
PA (PFIZ) PFIZER PROD INC.
PA (ABGE-) ABGENIX INC.
XX
PI Bedian V, Gladue RP, Corvalan J, Jia X, Feng X;
XX
DR WPI; 2003-441521/41.
DR P-PSDB; ADE28471.
XX
PT New chimeric or human monoclonal antibody or its antigen-binding portion
PT that specifically binds to and activates human CD40, useful for enhancing
PT an immune response in a human, or treating cancer, HIV, neutropenia or
PT viral infections.
XX
PS Claim 24; SEQ ID NO 77; 177pp; English.
XX
CC The invention relates to a novel chimeric or human monoclonal antibody or
CC its antigen-binding portion that specifically binds to and activates
CC human CD40. The anti-CD40 antibody of the invention demonstrates
CC cytostatic, virucide, antibacterial, immunostimulant and anti-HIV
CC activities and may be useful for treating a hyperproliferative disorder
CC such as cancer, viral and bacterial infection or genetic, primary or
CC combined immunodeficiency conditions including neutropenia or HIV
CC infection. The anti-CD40 antibodies may also be useful for detecting CD40
CC in a biological sample in vitro or in vivo, as well as during gene
CC therapy procedures. The current sequence is that of the human anti-CD40
CC antibody full length heavy chain cDNA of the invention.
XX
SQ Sequence 1401 BP; 311 A; 460 C; 380 G; 250 T; 0 U; 0 Other;

Query Match 77.1%; Score 404; DB 10; Length 1401;
Best Local Similarity 87.2%; Pred. No. 3.1e-99;
Matches 462; Conservative 0; Mismatches 50; Indels 18; Gaps 1;

Qy	13	ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTGTCTCAG	72
Db	1	ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCCCAG	60
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	132
Db	61	GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC	120
Qy	133	TGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	121	TGCACTGTCTCTGGTGGCTCCATCAGAGGTTACTACTGGAGCTGGATCCGGCAGCCCCCT	180
Qy	193	GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCG	252
Db	181	GGGAAGGGACTGGAGTGGATTGGGTATATCTATTACAGTGGGAGCACCAACTACAACCCC	240
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	241	TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG	300
Qy	313	CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA-----	360
Db	301	CTGAACCTCTGTGACCGCTGCGGACACGGCCGTGTATTATTGTGCGAGAAAGGGGGGCCCTC	360

```

Qy      361 -----GTAATTAATTGGTTCGACCCCTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCA 414
          |          ||||| ||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      361 TACGGTGACTACGGCTGGTTCGCCCCCTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCA 420

Qy      415 GCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGG 474
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      421 GCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG 480

Qy      475 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      481 AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 530

```

RESULT 10

AAZ50012

ID AAZ50012 standard; cDNA; 1634 BP.

XX

AC AAZ50012;

XX

DT 25-APR-2000 (first entry)

XX

DE Human immune system molecule, ISMO-2 cDNA.

XX

KW Human; immune system molecule; ISMO-2; Incyte clone 2849752; diagnosis;

KW treatment; prevention; cell proliferation; immune system disorder; ss.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT CDS 78..1490

FT /*tag= a

FT /product= "ISMO-2"

FT /note= "ISMO-2 shows homology to vertebrate

FT immunoglobulin gamma heavy-chain"

FT sig_peptide 78..134

FT /*tag= b

FT mat_peptide 135..1487

FT /*tag= c

FT /product= "Mature ISMO-2 protein"

FT misc_binding 432..473

FT /*tag= d

FT /bound_moiety= "Hybridisation probe"

XX

PN WO200000608-A2.

XX

PD 06-JAN-2000.

XX

PF 21-JUN-1999; 99WO-US013995.

XX

PR 30-JUN-1998; 98US-00107223.

XX

PA (INCY-) INCYTE PHARM INC.

XX

PI Lal P, Tang YT, Corley NC, Gorgone G, Guegler KJ, Patterson C;

PI Baughn MR;

XX

Db 555 GGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 607

RESULT 11

ADE28418

ID ADE28418 standard; cDNA; 1401 BP.

XX

AC ADE28418;

XX

DT 29-JAN-2004 (first entry)

XX

DE Human anti-CD40 antibody 15-1-1 variable region heavy chain cDNA.

XX

KW anti-CD40 monoclonal antibody; CD40; cytostatic; virucide; antibacterial;

KW immunostimulant; anti-HIV; hyperproliferative; cancer; viral;

KW bacterial infection; immunodeficiency; neutropenia; HIV; gene therapy;

KW human; variable region heavy chain; ss; gene; 15-1-1.

XX

OS Homo sapiens.

XX

PN WO2003040170-A2.

XX

PD 15-MAY-2003.

XX

PF 08-NOV-2002; 2002WO-US036107.

XX

PR 09-NOV-2001; 2001US-0348980P.

XX

PA (PFIZ) PFIZER PROD INC.

PA (ABGE-) ABGENIX INC.

XX

PI Bedian V, Gladue RP, Corvalan J, Jia X, Feng X;

XX

DR WPI; 2003-441521/41.

DR P-PSDB; ADE28419.

XX

PT New chimeric or human monoclonal antibody or its antigen-binding portion
PT that specifically binds to and activates human CD40, useful for enhancing
PT an immune response in a human, or treating cancer, HIV, neutropenia or
PT viral infections.

XX

PS Claim 24; SEQ ID NO 25; 177pp; English.

XX

CC The invention relates to a novel chimeric or human monoclonal antibody or
CC its antigen-binding portion that specifically binds to and activates
CC human CD40. The anti-CD40 antibody of the invention demonstrates
CC cytostatic, virucide, antibacterial, immunostimulant and anti-HIV
CC activities and may be useful for treating a hyperproliferative disorder
CC such as cancer, viral and bacterial infection or genetic, primary or
CC combined immunodeficiency conditions including neutropenia or HIV
CC infection. The anti-CD40 antibodies may also be useful for detecting CD40
CC in a biological sample in vitro or in vivo, as well as during gene
CC therapy procedures. The current sequence is that of the human anti-CD40
CC antibody variable region heavy chain cDNA of the invention.

XX

SQ Sequence 1401 BP; 319 A; 452 C; 372 G; 258 T; 0 U; 0 Other;

Query Match

75.9%; Score 397.6; DB 10; Length 1401;

Best Local Similarity 86.4%; Pred. No. 1.7e-97;
Matches 458; Conservative 0; Mismatches 54; Indels 18; Gaps 1;

```

Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
      |||
Db      1 ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60

Qy     73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
      |||
Db     61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy    133 TCGCTGTCTATGGTGGTTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
      |||
Db    121 TGCAGTGTCTCTGGTGGCTCCATCAGAAGTTACTACTGGACCTGGATCCGGCAGCCCCCA 180

Qy    193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
      |||
Db    181 GGAAGGGACTGGAGTGGATTGGATATATCTATTACAGTGGGAGCACCAACTACAATCCC 240

Qy    253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
      |||
Db    241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACATGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy    313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA----- 360
      |||
Db    301 CTGAGTTCTGTGACCGCTGCGGACACGGCCGTTTATTACTGTGCGAGAAAGGGTGACTAC 360

Qy    361 -----GTAATTAATTGGTTTCGACCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA 414
      |||
Db    361 GGTGGTAATTTTAACTACTTTTACCAGTGGGGCCAGGGAACCCTGGTACCGTCTCCTCA 420

Qy    415 GCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGG 474
      |||
Db    421 GCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG 480

Qy    475 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
      |||
Db    481 AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 530

```

RESULT 12

AAT26889

ID AAT26889 standard; cDNA; 1418 BP.

XX

AC AAT26889;

XX

DT 30-OCT-1996 (first entry)

XX

DE Anti-rhesus D recombinant antibody D7C2 heavy chain cDNA.

XX

KW Human monoclonal antibody; immunoglobulin isotype IgM; agglutination;

KW rhesus positive; rhesus negative; haemolysis; heavy chain; gamma 1;

KW variable region; insect host cell; baculovirus; recombinant production;

KW ds.

XX

OS Homo sapiens.

OS Synthetic.

RESULT 14

AAC66522

ID AAC66522 standard; cDNA; 1567 BP.

XX

AC AAC66522;

XX

DT 15-FEB-2001 (first entry)

XX

DE Human immune system associated protein HISAP-4 coding sequence.

XX

KW Human; immune system associated protein; HISAP-4; immune disorder;

KW infection; autoimmune disease; cancer; ss.

XX

OS Homo sapiens.

XX

PN US6135941-A.

XX

PD 24-OCT-2000.

XX

PF 27-MAR-1998; 98US-00049672.

XX

PR 27-MAR-1998; 98US-00049672.

XX

PA (INCY-) INCYTE PHARM INC.

XX

PI Tang YT, Yue H, Lal P, Corley NC, Guegler KJ, Baughn MR;

PI Hillman JL, Au-Young J;

XX

DR WPI; 2001-030926/04.

DR P-PSDB; AAB36206.

XX

PT New human immune system associated proteins (HISAP) and polynucleotides
PT encoding the HISAP, useful for diagnosing, treating or preventing immune
PT or cell proliferative disorders or infections.

XX

PS Claim 3; Col 79-80; 54pp; English.

XX

CC The present invention provides the coding and protein sequences for a
CC number of human immune system associated proteins (HISAPs). These can be
CC used in the diagnosis and treatment of various autoimmune disorders,
CC infections and cell proliferation diseases. The diseases include AIDS,
CC adult respiratory distress syndrome, anaemia, asthma, atherosclerosis,
CC Crohn's disease, irritable bowel syndrome, multiple sclerosis, myasthenia
CC gravis, osteoarthritis, rheumatoid arthritis, scleroderma, systemic lupus
CC erythematosus, arteriosclerosis, cirrhosis and cancer

XX

SQ Sequence 1567 BP; 346 A; 503 C; 428 G; 289 T; 0 U; 1 Other;

Query Match 75.0%; Score 392.8; DB 4; Length 1567;
Best Local Similarity 86.3%; Pred. No. 3.5e-96;
Matches 468; Conservative 0; Mismatches 47; Indels 27; Gaps 2;

Qy 10 ACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT 69
| |||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db 75 AACATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTCCTGTCC 134

Qy 70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129

Db	135		CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTC	194
Qy	130		ACCTGCGCTGTCTATGGTGGTTCCTTCA-----GTGGTTACTACTGGAGCTGGATCCGC	183
Db	195		ACCTGCGCTGTCTCTGGTGGCTCCATCACTAGTGGTGGTTACTACTGGAGCTGGATCCGC	254
Qy	184		CAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAAC	243
Db	255		CAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGTACATCTATTACAGTGGGAGCACCTC	314
Qy	244		TACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTC	303
Db	315		TACAACCCGTCCCTCAAGAGTCGAGTTACCATATCAGTAGACACGTCCAAGAACCAGTTC	374
Qy	304		TCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA---	360
Db	375		TCCCTGAAGCTGAGCTCTGTGACTGCCGCAGACACGGCCGTGTATTACTGTGCCAGAGAT	434
Qy	361		-----GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTC	402
Db	435		GACGTAGGTTTAAGGGGGGGAACACTACGGTATGGACGTCTGGGGCCAGGGAACCCTGGTC	494
Qy	403		ACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG	462
Db	495		ACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG	554
Qy	463		AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG	522
Db	555		AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG	614
Qy	523		GT	524
Db	615		GT	616

RESULT 15

ADE28410

ID ADE28410 standard; cDNA; 1395 BP.

XX

AC ADE28410;

XX

DT 29-JAN-2004 (first entry)

XX

DE Human anti-CD40 antibody 10-8-3 variable region heavy chain cDNA.

XX

KW anti-CD40 monoclonal antibody; CD40; cytostatic; virucide; antibacterial;

KW immunostimulant; anti-HIV; hyperproliferative; cancer; viral;

KW bacterial infection; immunodeficiency; neutropenia; HIV; gene therapy;

KW human; variable region heavy chain; ss; gene; 10-8-3.

XX

OS Homo sapiens.

XX

PN WO2003040170-A2.

XX

PD 15-MAY-2003.

XX

PF 08-NOV-2002; 2002WO-US036107.
 XX
 PR 09-NOV-2001; 2001US-0348980P.
 XX
 PA (PFIZ) PFIZER PROD INC.
 PA (ABGE-) ABGENIX INC.
 XX
 PI Bedian V, Gladue RP, Corvalan J, Jia X, Feng X;
 XX
 DR WPI; 2003-441521/41.
 DR P-PSDB; ADE28411.
 XX
 PT New chimeric or human monoclonal antibody or its antigen-binding portion
 PT that specifically binds to and activates human CD40, useful for enhancing
 PT an immune response in a human, or treating cancer, HIV, neutropenia or
 PT viral infections.
 XX
 PS Claim 24; SEQ ID NO 17; 177pp; English.
 XX
 CC The invention relates to a novel chimeric or human monoclonal antibody or
 CC its antigen-binding portion that specifically binds to and activates
 CC human CD40. The anti-CD40 antibody of the invention demonstrates
 CC cytostatic, virucide, antibacterial, immunostimulant and anti-HIV
 CC activities and may be useful for treating a hyperproliferative disorder
 CC such as cancer, viral and bacterial infection or genetic, primary or
 CC combined immunodeficiency conditions including neutropenia or HIV
 CC infection. The anti-CD40 antibodies may also be useful for detecting CD40
 CC in a biological sample in vitro or in vivo, as well as during gene
 CC therapy procedures. The current sequence is that of the human anti-CD40
 CC antibody variable region heavy chain cDNA of the invention.
 XX
 SQ Sequence 1395 BP; 310 A; 457 C; 382 G; 246 T; 0 U; 0 Other;

Query Match 74.9%; Score 392.4; DB 10; Length 1395;
 Best Local Similarity 86.1%; Pred. No. 4.3e-96;
 Matches 451; Conservative 0; Mismatches 61; Indels 12; Gaps 1;

Qy	13	ATGAAACACCTGTGGTTCTTCCTCCTGGTGGCAGCTCCTAGATGGGTCTGTCTCAG	72
Db	1	ATGAAACACCTGTGGTTCTTCCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCCCAG	60
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	132
Db	61	GTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC	120
Qy	133	TGCGCTGTCTATGGTGGTTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	121	TGCACTGTCTCTGGTGGCTCCATCAGTAGTTACTACTGGATCTGGATCCGGCAGCCCGCC	180
Qy	193	GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG	252
Db	181	GGGAAGGGACTGGAATGGATTGGGCGTGTCTATACCAGTGGGAGCACCAACTACAACCCC	240
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	241	TCCCTCAAGAGTCGAGTCACCATGTCTAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG	300

score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	%		DB	ID	Description
		Query Match	Length			
1	524	100.0	524	3	US-09-042-353-419	Sequence 419, App
2	524	100.0	524	3	US-08-758-417A-219	Sequence 219, App
3	524	100.0	4926	3	US-09-042-353-418	Sequence 418, App
4	524	100.0	4926	3	US-08-758-417A-268	Sequence 268, App
5	395.6	75.5	1418	3	US-08-793-450-7	Sequence 7, Appli
6	392.8	75.0	1567	3	US-09-049-672A-17	Sequence 17, Appl
7	385.2	73.5	2674	4	US-09-372-425A-1	Sequence 1, Appli
8	383.8	73.2	403	3	US-09-042-353-357	Sequence 357, App
9	383.8	73.2	403	3	US-08-758-417A-205	Sequence 205, App
10	376.8	71.9	404	3	US-09-042-353-355	Sequence 355, App
11	376.8	71.9	404	3	US-08-758-417A-203	Sequence 203, App
12	354.8	67.7	1431	3	US-08-487-550-11	Sequence 11, Appl
13	354.8	67.7	1431	4	US-09-526-098-11	Sequence 11, Appl
14	354.8	67.7	1431	4	US-09-383-916-11	Sequence 11, Appl
15	342.4	65.3	1404	3	US-08-523-894-7	Sequence 7, Appli
16	342	65.3	1431	3	US-08-487-550-3	Sequence 3, Appli
17	342	65.3	1431	4	US-09-526-098-3	Sequence 3, Appli
18	342	65.3	1431	4	US-09-383-916-3	Sequence 3, Appli
19	341.8	65.2	417	4	US-09-203-768A-1	Sequence 1, Appli
20	340.8	65.0	1404	3	US-08-523-894-9	Sequence 9, Appli
21	340.8	65.0	1404	3	US-08-523-894-11	Sequence 11, Appl
22	321	61.3	413	3	US-09-042-353-351	Sequence 351, App
23	321	61.3	413	3	US-08-758-417A-199	Sequence 199, App
24	319.2	60.9	1341	4	US-09-372-425A-7	Sequence 7, Appli
25	311.2	59.4	462	3	US-08-724-752-14	Sequence 14, Appl
26	311.2	59.4	462	4	US-09-614-092A-14	Sequence 14, Appl
27	308.6	58.9	399	3	US-08-724-752-10	Sequence 10, Appl
28	308.6	58.9	399	4	US-09-614-092A-10	Sequence 10, Appl
29	306	58.4	516	4	US-09-472-087-33	Sequence 33, Appl
30	290	55.3	402	1	US-08-259-372A-5	Sequence 5, Appli
31	290	55.3	402	1	US-08-468-671-5	Sequence 5, Appli
32	286.2	54.6	687	3	US-08-545-809A-34	Sequence 34, Appl
33	278.4	53.1	426	2	US-08-480-774A-1	Sequence 1, Appli
34	275.6	52.6	1543	4	US-09-800-729-74	Sequence 74, Appl
35	274.6	52.4	450	4	US-09-582-337-13	Sequence 13, Appl
36	272.8	52.1	384	2	US-08-477-553A-49	Sequence 49, Appl
37	269.6	51.5	369	3	US-08-793-450-3	Sequence 3, Appli
38	268	51.1	363	2	US-08-477-553A-50	Sequence 50, Appl
39	260.6	49.7	622	3	US-08-545-809A-59	Sequence 59, Appl
40	258.2	49.3	1458	4	US-08-030-175-7	Sequence 7, Appli
41	257.8	49.2	423	3	US-08-803-085-2	Sequence 2, Appli
42	256.6	49.0	1458	4	US-08-030-175-6	Sequence 6, Appli
43	256.4	48.9	1392	4	US-09-472-087-30	Sequence 30, Appl
44	256.4	48.9	1392	4	US-09-472-087-59	Sequence 59, Appl
45	256.2	48.9	285	3	US-09-042-353-150	Sequence 150, App

ALIGNMENTS

RESULT 1

US-09-042-353-419

; Sequence 419, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/810,279

; FILING DATE: 17-DEC-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/853,408

; FILING DATE: 18-MAR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/904,068

; FILING DATE: 23-JUN-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/165,699

; FILING DATE: 10-DEC-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 419:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 524 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-419

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Query Match          100.0%; Score 524; DB 3; Length 524;
Best Local Similarity 100.0%; Pred. No. 3.4e-150;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCTCCTCCTGGTGGCAGCTCCTAGATGG 60
        |||
Db      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCTCCTCCTGGTGGCAGCTCCTAGATGG 60

Qy     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
        |||
Db     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120

Qy    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
        |||
Db    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180

Qy    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240
        |||
Db    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240

Qy    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
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Db    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300

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Qy      301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
        |||
Db      301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360

Qy      361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 420
        |||
Db      361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 420

Qy      421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
        |||
Db      421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480

Qy      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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Db      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524

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RESULT 2

US-08-758-417A-219

; Sequence 219, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

; APPLICATION NUMBER: US 08/352,322

; FILING DATE: 07-DEC-1994

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

; APPLICATION NUMBER: US 08/165,699

; FILING DATE: 10-DEC-1993

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

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; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Serafini, Andrew T.
; REGISTRATION NUMBER: 41,303
; REFERENCE/DOCKET NUMBER: 014643-009030US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 219:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 524 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 219:
US-08-758-417A-219

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Query Match          100.0%; Score 524; DB 3; Length 524;
Best Local Similarity 100.0%; Pred. No. 3.4e-150;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
      |||
Db      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60

Qy     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
      |||
Db     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120

Qy    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
      |||
Db    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180

Qy    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 240
      |||
Db    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 240

Qy    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
      |||
Db    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300

Qy    301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
      |||
Db    301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360

Qy    361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
      |||
Db    361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420

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Qy 421 ACCAAGGGCCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 421 ACCAAGGGCCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480

Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 ||||||||||||||||||||||||||||||||||||||||||||
 Db 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524

RESULT 3

US-09-042-353-418

; Sequence 418, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/810,279

; FILING DATE: 17-DEC-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/853,408

; FILING DATE: 18-MAR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/904,068

; FILING DATE: 23-JUN-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

; PRIOR APPLICATION DATA:


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; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 418:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4926 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-418

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Query Match          100.0%; Score 524; DB 3; Length 4926;
Best Local Similarity 100.0%; Pred. No. 9.2e-150;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
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Db      16 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 75

Qy     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     76 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 135

Qy    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    136 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 195

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Qy 181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240
 |||
 Db 196 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 255

Qy 241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
 |||
 Db 256 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 315

Qy 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
 |||
 Db 316 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 375

Qy 361 GTAATTAATTGGTTCGACCCCTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 420
 |||
 Db 376 GTAATTAATTGGTTCGACCCCTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 435

Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 |||
 Db 436 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 495

Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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RESULT 4

US-08-758-417A-268

; Sequence 268, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
 ; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

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; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Serafini, Andrew T.
; REGISTRATION NUMBER: 41,303
; REFERENCE/DOCKET NUMBER: 014643-009030US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 268:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4926 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 268:
US-08-758-417A-268

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Query Match          100.0%; Score 524; DB 3; Length 4926;
Best Local Similarity 100.0%; Pred. No. 9.2e-150;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      16 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 75

Qy     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     76 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 135

Qy    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    136 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 195

Qy    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 240
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    196 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 255

Qy    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    256 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 315

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Qy 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
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 Db 316 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 375
 Qy 361 GTAATTAATTGGTTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
 |||
 Db 376 GTAATTAATTGGTTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 435
 Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
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 Db 436 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 495
 Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||
 Db 496 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 539

RESULT 5

US-08-793-450-7

; Sequence 7, Application US/08793450

; Patent No. 6312690

; GENERAL INFORMATION:

; APPLICANT: EDELMAN, LENA

; APPLICANT: MARGARITTE, CHRISTEL

; APPLICANT: KACZOREK, MICHEL

; APPLICANT: CHAABIHI, HASSAN

; TITLE OF INVENTION: MONOCLONAL RECOMBINANT ANTI-RHESUS D

; TITLE OF INVENTION:

; NUMBER OF SEQUENCES: 25

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,

; ADDRESSEE: P.C.

; STREET: 1755 SOUTH JEFFERSON DAVIS HIGHWAY, SUITE 400

; CITY: ARLINGTON

; STATE: VA

; COUNTRY: USA

; ZIP: 22202

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/793,450

; FILING DATE: 03-MAR-1997

; CLASSIFICATION: 536

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: FR 94/10566

; FILING DATE: 02-SEP-1994

; ATTORNEY/AGENT INFORMATION:

; NAME: OBLON, NORMAN F.

; REGISTRATION NUMBER: 24,618

; REFERENCE/DOCKET NUMBER: 660-118-0 PCT

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703-413-3000

; TELEFAX: 703-413-2220

; INFORMATION FOR SEQ ID NO: 7:

Db 493 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 536

RESULT 6

US-09-049-672A-17

; Sequence 17, Application US/09049672A

; Patent No. 6135941

; GENERAL INFORMATION:

; APPLICANT: Hillman, Jennifer L.

; APPLICANT: Lal, Preeti

; APPLICANT: Tang, Y. Tom

; APPLICANT: Yue, Henry

; APPLICANT: Au-Young, Janice

; APPLICANT: Corley, Neil C.

; APPLICANT: Guegler, Karl J.

; APPLICANT: Baughn, Mariah R.

; TITLE OF INVENTION: HUMAN IMMUNE SYSTEM ASSOCIATED PROTEINS

; NUMBER OF SEQUENCES: 28

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Incyte Pharmaceuticals, Inc.

; STREET: 3174 Porter Drive

; CITY: Palo Alto

; STATE: CA

; COUNTRY: USA

; ZIP: 94304

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FastSEQ for Windows Version 2.0

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/049,672A

; FILING DATE: HERewith

; CLASSIFICATION: 536

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER:

; FILING DATE:

; ATTORNEY/AGENT INFORMATION:

; NAME: Cerrone, Michael C

; REGISTRATION NUMBER: 39,132

; REFERENCE/DOCKET NUMBER: PF-0497 US

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 650-855-0555

; TELEFAX: 650-845-4166

; TELEX:

; INFORMATION FOR SEQ ID NO: 17:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1567 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; IMMEDIATE SOURCE:

; LIBRARY: PANCTUT01

; CLONE: 1513264

US-09-049-672A-17

Query Match

75.0%; Score 392.8; DB 3; Length 1567;

Best Local Similarity 86.3%; Pred. No. 5.8e-110;
Matches 468; Conservative 0; Mismatches 47; Indels 27; Gaps 2;

Qy 10 ACCATGAAACACCTGTGGTTCCTCCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT 69
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 75 AACATGAAACACCTGTGGTTCCTCCCTCCTGCTGGTGGCAGCTCCCAGATGGGTCCTGTCC 134

Qy 70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 135 CAGGTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTC 194

Qy 130 ACCTGCGCTGTCTATGGTGGTTCCTTCA-----GTGGTTACTACTGGAGCTGGATCCGC 183
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 195 ACCTGCGCTGTCTCTGGTGGCTCCATCACTAGTGGTGGTTACTACTGGAGCTGGATCCGC 254

Qy 184 CAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAAC 243
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 255 CAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGTACATCTATTACAGTGGGAGCACCTC 314

Qy 244 TACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTC 303
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 315 TACAACCCGTCCCTCAAGAGTCGAGTTACCATATCAGTAGACACGTCCAAGAACCAGTTC 374

Qy 304 TCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA--- 360
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 375 TCCCTGAAGCTGAGCTCTGTGACTGCCGACACACGGCCGTGTATTACTGTGCCAGAGAT 434

Qy 361 -----GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTC 402
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 435 GACGTAGGTTTAAGGGGGGGAACACTACGGTATGGACGCTCTGGGGCCAGGGAACCCTGGTC 494

Qy 403 ACCGTCTCCTCAGCCTCAACCAAGGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG 462
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 495 ACCGTCTCCTCAGCCTCCACCAAGGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG 554

Qy 463 AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG 522
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 555 AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG 614

Qy 523 GT 524
| |
Db 615 GT 616

RESULT 7

US-09-372-425A-1

; Sequence 1, Application US/09372425A

; Patent No. 6475749

; GENERAL INFORMATION:

; APPLICANT: Sherie L. Morrison

; APPLICANT: Ramon Montano

TITLE OF INVENTION: Improved Rh Antibody

```

; NUMBER OF SEQUENCES: 11

```

CORRESPONDENCE ADDRESS:

ADDRESSEE: Oppenheimer Wolff & Donnelly LLP

STREET: 2029 Century Park East, Suite 3800

; CITY: Los Angeles

```

; STATE: CA
; COUNTRY: USA
; ZIP: 90067
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy Disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: Windows 98
; SOFTWARE: MS Word
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/372,425A
; FILING DATE: August 11, 1999
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Oldenakmp, David J.
; REGISTRATION NUMBER: 29,421
; REFERENCE/DOCKET NUMBER: 510015-223
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (310) 788-5000
; TELEFAX: (310) 788-5100
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2674 nucleotides
; TYPE: nucleotide
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Heavy chain with Tailpiece - DNA
; MOLECULE TYPE: (with introns)
US-09-372-425A-1

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Query Match          73.5%; Score 385.2; DB 4; Length 2674;
Best Local Similarity 83.8%; Pred. No. 1.5e-107;
Matches 469; Conservative 0; Mismatches 43; Indels 48; Gaps 1;

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Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGGTCCTGTCTCAG 72
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGGTCCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 TGCCTGTCTATGGTGGTTCCTTCAGTGGTCACTACTGGAGTTGGATCCGCCAGCCCCCA 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAATCAATCATAGTGAAGCACCAACTACAACCCG 252
        || ||||| |||||||||||||| ||||| |||||||||||||| |||||||
Db     181 GGAAGGGGCTGGAGTGGATTGGAGAAATCGATCATAGTGAAGCACCAATTACAACCCG 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
        || |||||||||||||||||||||||||||||||||||||||||| ||||
Db     241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCGTGAAG 300

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTG- 371

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; FILING DATE: 16-DEC-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 357:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 403 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-357

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Query Match          73.2%; Score 383.8; DB 3; Length 403;
Best Local Similarity 97.0%; Pred. No. 1.8e-107;
Matches 391; Conservative 0; Mismatches 12; Indels 0; Gaps 0;

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Qy 13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
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 Db 1 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60

Qy 73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
 |||
 Db 61 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy 133 TGCGCTGTCTATGGTGGTTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
 |||
 Db 121 TGCGCTGTCTATGGTGGGTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCCCCA 180

Qy 193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
 |||
 Db 181 GGTAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAACCCG 240

Qy 253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
 ||
 Db 241 TCCCTCAAGAGTCGAGTCACCATATCAGTCGACACGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy 313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
 |||
 Db 301 CTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 360

Qy 373 TTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG 415
 |||
 Db 361 TTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG 403

RESULT 9

US-08-758-417A-205

; Sequence 205, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
 ; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

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; FILING DATE: 10-OCT-1996
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Serafini, Andrew T.
; REGISTRATION NUMBER: 41,303
; REFERENCE/DOCKET NUMBER: 014643-009030US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 205:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 403 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 205:
US-08-758-417A-205

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Query Match          73.2%;  Score 383.8;  DB 3;  Length 403;
Best Local Similarity 97.0%;  Pred. No. 1.8e-107;
Matches 391;  Conservative 0;  Mismatches 12;  Indels 0;  Gaps 0;

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Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1  ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
        ||||||||||||||||| |||||||||||||||||||||||||||||||||
Db     121 TGCCTGTCTATGGTGGGTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCCCCA 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAATCAATCATAGTGAAGCACCAACTACAACCCG 252
        ||||||||| ||||||||||||||| |||||||||||||||||||||||||
Db     181 GGTAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAACCCG 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312

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Db      241 TCCCTCAAGAGTCGAGTCACCATATCAGTCGACACGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy      1313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
      |||||
Db      301 CTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 360

Qy      373 TTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG 415
      |||||
Db      361 TTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG 403

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RESULT 10

US-09-042-353-355

; Sequence 355, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/810,279

; FILING DATE: 17-DEC-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/853,408

; FILING DATE: 18-MAR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/904,068

; FILING DATE: 23-JUN-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; PRIOR APPLICATION DATA:

Qy 130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
 |||
 Db 129 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCC 188
 Qy 190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAAC 249
 |||
 Db 189 CCAGGTAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAAC 248
 Qy 250 CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG 309
 |||
 Db 249 CCGTCCCTCAAGAGTCGAGTCACCATATCAGTCGACACGTCCAAGAACCAGTTCTCCCTG 308
 Qy 310 AAAGTGAAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAAT 369
 |||
 Db 309 AAAGTGAAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAAT 368
 Qy 370 TGGTTCGACCCCTTGGGGCCAGGGAACCCTGGTCACC 405
 |||
 Db 369 TGGTTCGACCCCTTGGGGCCAGGGAACCCTGGTCACC 404

RESULT 11

US-08-758-417A-203

; Sequence 203, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
 ; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

; APPLICATION NUMBER: US 08/352,322

; FILING DATE: 07-DEC-1994

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

; APPLICATION NUMBER: US 08/165,699

Db

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RESULT 12

US-08-487-550-11

; Sequence 11, Application US/08487550

; Patent No. 6113898

; GENERAL INFORMATION:

; APPLICANT: Anderson, Darrell R.

; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC

; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,

; TITLE OF INVENTION: PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF

AS

; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"

; NUMBER OF SEQUENCES: 12

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS

; STREET: 699 Prince Street

; CITY: Alexandria

; STATE: VA

; COUNTRY: USA

; ZIP: 22314

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/487,550

; FILING DATE: 07-JUN-1995

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: Teskin, Robin L.

; REGISTRATION NUMBER: 35,030

; REFERENCE/DOCKET NUMBER: 012712-131

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703-836-6620

; TELEFAX: 703-836-2021

; INFORMATION FOR SEQ ID NO: 11:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1431 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: not relevant

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 1..1431

; FEATURE:

; NAME/KEY: mat_peptide

; LOCATION: 1..1431

US-08-487-550-11

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Best Local Similarity 83.0%; Pred. No. 2.2e-98;

Matches 455; Conservative 0; Mismatches 57; Indels 36; Gaps 3;

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Qy 73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
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 Db 61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy 133 TGCCTGTCTATGGTGGTTCTTCA---GTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
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 Db 121 TGCCTGTCTCTGGTGGCTCCATCAGCGGTGGTTATGGCTGGGGCTGGATCCGCCAGCCC 180

Qy 190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATC---AATCATAGTGGAAGCACCAACTAC 246
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 Db 181 CCAGGGAAGGGGCTGGAGTGGATTGGGAGTTTCTATAGTAGTAGTGGGAACACCTACTAC 240

Qy 247 AACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCT 306
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 Db 241 AACCCCTCCCTCAAGAGTCAAGTCACCATTTCAACAGACACGTCCAAGAACCAGTTCTCC 300

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 Db 301 CTGAAGCTGAACCTCTATGACCGCCGCGGACACGGCCGTGTATTACTGTGTGAGAGATCGT 360

Qy 362 -----TAATTAATTGGTTCGACCCTTGGGGCCAGGGAACC 396
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 Db 361 CTTTTTTCAGTTGTTGGAATGGTTTACAACAACCTGGTTCGATGTCTGGGGCCCGGGAGTC 420

Qy 397 CTGGTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCC 456
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RESULT 13

US-09-526-098-11

; Sequence 11, Application US/09526098

; Patent No. 6492134

; GENERAL INFORMATION:

; APPLICANT: Anderson, Darrell R.

; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC

; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,

; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF

AS

; TITLE OF INVENTION: IMMUNOSUPPRESANTS"

; NUMBER OF SEQUENCES: 12

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS

; STREET: 699 Prince Street

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; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/526,098
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/383,916
; FILING DATE:
; APPLICATION NUMBER: US 08/487,550
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1431 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: not relevant
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1431
; FEATURE:
; NAME/KEY: mat_peptide
; LOCATION: 1..1431
US-09-526-098-11

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Query Match          67.7%; Score 354.8; DB 4; Length 1431;
Best Local Similarity 83.0%; Pred. No. 2.2e-98;
Matches 455; Conservative 0; Mismatches 57; Indels 36; Gaps 3;

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Db      1 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60
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Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
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Db      61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120
        |||

Qy      133 TGCGCTGTCTATGGTGGTTCTTCA---GTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
        |||
Db      121 TGCGCTGTCTCTGGTGGCTCCATCAGCGGTGGTTATGGCTGGGGCTGGATCCGCCAGCCC 180
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Qy      190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATC---AATCATAGTGGAAGCACCAACTAC 246

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Qy      307 CTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAG----- 361
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Qy      362 -----TAATTAATTGGTTCGACCCTTGGGGCCAGGGAACC 396
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Qy      517 GAACCGGT 524
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Db      541 GAACCGGT 548

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RESULT 14

US-09-383-916-11

; Sequence 11, Application US/09383916

; Patent No. 6709654

; GENERAL INFORMATION:

; APPLICANT: Anderson, Darrell R.

; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC

; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,

; TITLE OF INVENTION: PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF

AS

; TITLE OF INVENTION: IMMUNOSUPPRESANTS"

; NUMBER OF SEQUENCES: 12

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS

; STREET: 699 Prince Street

; CITY: Alexandria

; STATE: VA

; COUNTRY: USA

; ZIP: 22314

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/383,916

; FILING DATE: 26-AUG-1999

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

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; APPLICATION NUMBER: US 08/487,550
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1431 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: not relevant
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1431
; FEATURE:
; NAME/KEY: mat_peptide
; LOCATION: 1..1431
US-09-383-916-11

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Query Match          67.7%; Score 354.8; DB 4; Length 1431;
Best Local Similarity 83.0%; Pred. No. 2.2e-98;
Matches 455; Conservative 0; Mismatches 57; Indels 36; Gaps 3;

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Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
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Db      1  ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60

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Db      61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTCCTTCA---GTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
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Db     121 TGCCTGTCTCTGGTGGCTCCATCAGCGTGGTTATGGCTGGGGCTGGATCCGCCAGCCC 180

Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATC---AATCATAGTGGAAGCACCAACTAC 246
        ||||| ||||| |||||||||||| || ||| ||||| ||| ||||| |||||
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Qy     362 -----TAATTAATTGGTTCGACCCTTGGGGCCAGGGAACC 396
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Qy     397 CTGGTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCC 456

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Db      421 CTGGTCACCGTCTCTCTCAGCTAGCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCC 480
Qy      457 TCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCC 516
Db      481 TCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCC 540
Qy      517 GAACCGGT 524
Db      541 GAACCGGT 548

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RESULT 15

US-08-523-894-7

; Sequence 7, Application US/08523894

; Patent No. 6136310

; GENERAL INFORMATION:

; APPLICANT: Hanna, Nabil

; APPLICANT: Newman, Roland A.

; APPLICANT: Reff, Mitchell E.

; TITLE OF INVENTION: Recombinant Anti-CD4 Antibodies for Human

; TITLE OF INVENTION: Therapy

; NUMBER OF SEQUENCES: 59

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS

; STREET: 699 Prince Street

; CITY: Alexandria

; STATE: VA

; COUNTRY: USA

; ZIP: 22314-3187

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/523,894

; FILING DATE: 06-SEP-1995

; CLASSIFICATION: 424

; ATTORNEY/AGENT INFORMATION:

; NAME: Teskin, Robin L.

; REGISTRATION NUMBER: 35,030

; REFERENCE/DOCKET NUMBER: 012712-165

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703-836-6620

; TELEFAX: 703-836-2021

; INFORMATION FOR SEQ ID NO: 7:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1404 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; POSITION IN GENOME:

; CHROMOSOME/SEGMENT: heavy chain variable and constant gamma

; CHROMOSOME/SEGMENT: 4

; FEATURE:

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; NAME/KEY: CDS
; LOCATION: 1..1404
; FEATURE:
; NAME/KEY: mat_peptide
; LOCATION: 1..1404
US-08-523-894-7

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Best Local Similarity 82.3%; Pred. No. 1.3e-94;
Matches 436; Conservative 0; Mismatches 76; Indels 18; Gaps 3;

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Job time : 77.5326 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

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(without alignments)
7166.911 Million cell updates/sec

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Perfect score: 524
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Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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	3	407.2	77.7	1401	15	US-10-292-088-85	Sequence 85, Appl

	4	406.2	77.5	1990	17	US-10-684-109-69	Sequence 69, Appl
c	5	406.2	77.5	1990	17	US-10-684-109-70	Sequence 70, Appl
	6	405.6	77.4	629	16	US-10-264-049-2156	Sequence 2156, Ap
	7	404	77.1	1401	15	US-10-292-088-69	Sequence 69, Appl
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	11	396.6	75.7	1990	17	US-10-684-109-98	Sequence 98, Appl
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	13	392.4	74.9	1395	15	US-10-292-088-21	Sequence 21, Appl
	14	385.2	73.5	669	10	US-09-972-656-65	Sequence 65, Appl
	15	385.2	73.5	2674	15	US-10-194-801C-1	Sequence 1, Appli
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	18	371	70.8	1996	17	US-10-684-109-110	Sequence 110, App
c	19	371	70.8	1996	17	US-10-684-109-111	Sequence 111, App
	20	367.8	70.2	687	10	US-09-972-656-81	Sequence 81, Appl
	21	365.8	69.8	690	10	US-09-972-656-71	Sequence 71, Appl
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	23	361	68.9	519	16	US-10-309-762-174	Sequence 174, App
	24	355.6	67.9	663	10	US-09-972-656-79	Sequence 79, Appl
	25	354.8	67.7	1431	9	US-09-758-173-11	Sequence 11, Appl
	26	354.8	67.7	1431	9	US-09-948-429B-11	Sequence 11, Appl
	27	354.8	67.7	1431	13	US-10-124-905-11	Sequence 11, Appl
	28	354.8	67.7	1431	15	US-10-124-807-11	Sequence 11, Appl
	29	354.8	67.7	1431	15	US-10-291-532-11	Sequence 11, Appl
	30	353.4	67.4	1539	9	US-09-822-849A-87	Sequence 87, Appl
	31	353.2	67.4	1431	13	US-10-073-138-6	Sequence 6, Appli
	32	342.4	65.3	1404	14	US-10-211-357-7	Sequence 7, Appli
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	35	342	65.3	1431	13	US-10-124-905-3	Sequence 3, Appli
	36	342	65.3	1431	15	US-10-124-807-3	Sequence 3, Appli
	37	342	65.3	1431	15	US-10-291-532-3	Sequence 3, Appli
	38	341.8	65.2	417	15	US-10-300-675-1	Sequence 1, Appli
	39	341.6	65.2	655	9	US-09-920-345-4	Sequence 4, Appli
	40	340.8	65.0	1404	14	US-10-211-357-9	Sequence 9, Appli
	41	340.8	65.0	1404	14	US-10-211-357-11	Sequence 11, Appl
	42	340.4	65.0	1431	13	US-10-073-138-2	Sequence 2, Appli
	43	338.2	64.5	1566	16	US-10-108-260A-1850	Sequence 1850, Ap
	44	321.6	61.4	539	16	US-10-309-762-172	Sequence 172, App
	45	321	61.3	481	17	US-10-693-629-43	Sequence 43, Appl

ALIGNMENTS

RESULT 1

US-10-684-109-104

; Sequence 104, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

```

; TITLE OF INVENTION: Erythropoietin Receptor Binding
; TITLE OF INVENTION: Antibodies
; FILE REFERENCE: 6989.US.02
; CURRENT APPLICATION NUMBER: US/10/684,109
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 10/269,711
; PRIOR FILING DATE: 2002-10-14
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 1990
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-684-109-104

```

```

Query Match          78.1%; Score 409.4; DB 17; Length 1990;
Best Local Similarity 88.5%; Pred. No. 4.8e-120;
Matches 456; Conservative 0; Mismatches 56; Indels 3; Gaps 1;

```

```

Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
        |||
Db      1 ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
        |||
Db      61 GTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCGCTGTCTATGGTGGTTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
        |||
Db     121 TGCAGTGTCTCTGGTGGCTCCATCAGTCGTTACTACTGGAGCTGGATCCGGCAGCCCCCA 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCG 252
        |||
Db     181 GGGAAGGGACTGGAGTGGATTGGGTATGTCTCTTACAGTGGGAGCACCTACTACAACCCC 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
        |||
Db     241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
        |||
Db     301 CTGAGCTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAGATAAACTGGGG 360

Qy     373 TT---CGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGC 429
        |||
Db     361 ATTGGAGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGC 420

Qy     430 CCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG 489
        |||
Db     421 CCATCGGTCTTCCCCCTGGCGCCCTGCTCTAGAAGCACCTCCGAGAGCACAGCCGCCCTG 480

Qy     490 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
        |||
Db     481 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 515

```

RESULT 2

US-10-684-109-105/c
; Sequence 105, Application US/10684109
; Publication No. US20040175379A1
; GENERAL INFORMATION:
; APPLICANT: DeVries, Peter J.
; APPLICANT: Green, Larry L.
; APPLICANT: Ostrow, David H.
; APPLICANT: Reilly, Edward B.
; APPLICANT: Wieler, James
; TITLE OF INVENTION: Erythropoietin Receptor Binding
; TITLE OF INVENTION: Antibodies
; FILE REFERENCE: 6989.US.02
; CURRENT APPLICATION NUMBER: US/10/684,109
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 10/269,711
; PRIOR FILING DATE: 2002-10-14
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 105
; LENGTH: 1990
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-684-109-105

Db 1570 CCATCGGTCTTCCCCCTGGCGCCCTGCTCTAGAAGCACCTCCGAGAGCACAGCCGCCCTG 1511
 QY 490 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 Db 1510 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 1476

Query Match 77.7%; Score 407.2; DB 15; Length 1401;
Best Local Similarity 87.5%; Pred. No. 2.2e-119;
Matches 464; Conservative 0; Mismatches 48; Indels 18; Gaps 1;

Db 301 CTGAGTTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAAGGGGGGGCCTC 360
 Qy 361 -----GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCTGGTCACCGTCTCCTCA 414
 Db 361 TACGGTGACTACGGCTGGTTCGCCCCCTGGGGCCAGGGAACCTGGTCACCGTCTCCTCA 420
 Qy 415 GCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGG 474
 Db 421 GCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG 480
 Qy 475 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 Db 481 AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 530

US-10-684-109-69

; Publication No. US20040175379A1

; APPLICANT: DeVries, Peter J.

; APPLICANT: Ostrow, David H

; 'APPLICANT: Wieler, James

; TITLE OF INVENTION: Antibodies

; CURRENT APPLICATION NUMBER

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14

```
; NUMBER OF SEQ ID NOS: 115
```

```
; SOFTWARE: FastSEQ for Windows Version 4.0
```

; SEQ ID NO 69

; LENGTH: 1990

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-684-109-69

Query Match 77.5%; Score 406.2; DB 17; Length 1990;

Matches 454; Conservative 0; Mismatches 58; Indels 3; Gaps 1;

Qy 13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTGTCTCAG 72
||| || | ||||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Db 1 ATGAAGCATCTGTGGTTCTTCCTTCTCCTAGTGGCAGCTCCCAGATGGGTCTGTCCCAG 60

Qy 73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCAC 132
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Db 61 GTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCAC 120

Qy 133 TGCGCTGTCTATGGTGGTTCTTCAGTGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Db 121 TGCAGTGTCTCTGGTGCCTCCATCAGTAGTTACTACTGGAGCTGGATCCGCCAGCCCCA 180

Qy 193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
 || ||||| ||||| ||||| || ||| || || ||||| ||||| ||||| |||||
 Db 181 GGGAAGGGACTGGAGTGGATTGGGTATATCTATTACAGTGGGAGCACCAACTACAACCCC 240
 Qy 253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
 || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG 300
 Qy 313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 301 CTGAGGTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAGAGCGACTGGGG 360
 Qy 373 TTC---GACCCTTGGGGCCAGGGAACCCCTGGTCAACCGTCTCCTCAGCCTCAACCAAGGGC 429
 || ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 361 ATCGGGGACTACTGGGGCCAAGGAACCCCTGGTCAACCGTCTCCTCAGCCTCCACCAAGGGC 420
 Qy 430 CCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG 489
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 421 CCATCGGTCTTCCCCCTGGCGCCCTGCTCTAGAAGCACCTCCGAGAGCACAGCCGCCCTG 480
 Qy 490 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 481 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 515

RESULT 5

US-10-684-109-70/c

; Sequence 70, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

; TITLE OF INVENTION: Erythropoietin Receptor Binding

; TITLE OF INVENTION: Antibodies

; FILE REFERENCE: 6989.US.02

; CURRENT APPLICATION NUMBER: US/10/684,109

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14

; NUMBER OF SEQ ID NOS: 115

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 70

; LENGTH: 1990

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-684-109-70

Query Match 77.5%; Score 406.2; DB 17; Length 1990;

Best Local Similarity 88.2%; Pred. No. 5e-119;

Matches 454; Conservative 0; Mismatches 58; Indels 3; Gaps 1;

Qy 13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
 ||||| || ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 1990 ATGAAGCATCTGTGGTTCTTCCTTCTCCTAGTGGCAGCTCCAGATGGGTCCTGTCCAG 1931

Db 494 AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG 553
Qy 523 GT 524
||
Db 554 GT 555

RESULT 7

US-10-292-088-69
; Sequence 69, Application US/10292088
; Publication No. US20030211100A1
; GENERAL INFORMATION:
; APPLICANT: BEDIAN, VAHE
; APPLICANT: GLADUE, RONALD P.
; APPLICANT: CORVALAN, JOSE
; APPLICANT: JIA, XIAO-CHI
; APPLICANT: FENG, XIAO
; TITLE OF INVENTION: ANTIBODIES TO CD40
; FILE REFERENCE: ABX-PF/3 US
; CURRENT APPLICATION NUMBER: US/10/292,088
; CURRENT FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: 60/348,980
; PRIOR FILING DATE: 2001-11-09
; NUMBER OF SEQ ID NOS: 147
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 69
; LENGTH: 1401
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-292-088-69

Query Match 77.1%; Score 404; DB 15; Length 1401;
Best Local Similarity 87.2%; Pred. No. 2.3e-118;
Matches 462; Conservative 0; Mismatches 50; Indels 18; Gaps 1;

Qy 13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||
Db 1 ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCAGATGGGTCCTGTCCAG 60

Qy 73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
||||| ||| ||| ||| ||||||| ||||||| ||||||| ||||||| |||
Db 61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy 133 TCGCTGTCTATGGTGGTTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
||| ||||||| ||||||| ||| ||| ||||||| ||||||| ||||||| |||
Db 121 TGCACTGTCTCTGGTGGCTCCATCAGAGGTTACTACTGGAGCTGGATCCGGCAGCCCCCT 180

Qy 193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
|| ||||| ||||||| ||||||| ||| ||| ||| ||||||| ||||||| |||
Db 181 GGGAAGGGACTGGAGTGGATTGGGTATATCTATTACAGTGGGAGCACCAACTACAACCCC 240

Qy 253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
|| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||
Db 241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy 313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA----- 360
||| ||||||| ||||||| ||||||| ||||||| ||||||| |||

```

Db      301 CTGAACTCTGTGACCGCTGCGGACACGGCCGTGTATTATTGTGCGAGAAAGGGGGGCCTC 360
Qy      361 -----GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA 414
          |          ||||| ||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      361 TACGGTGACTACGGCTGGTTCGCCCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA 420
Qy      415 GCCTCAACCAAGGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGG 474
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      421 GCCTCCACCAAGGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG 480
Qy      475 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      481 AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 530

```

RESULT 8

US-10-684-109-86

```

; Sequence 86, Application US/10684109
; Publication No. US20040175379A1
; GENERAL INFORMATION:
; APPLICANT: DeVries, Peter J.
; APPLICANT: Green, Larry L.
; APPLICANT: Ostrow, David H.
; APPLICANT: Reilly, Edward B.
; APPLICANT: Wieler, James
; TITLE OF INVENTION: Erythropoietin Receptor Binding
; TITLE OF INVENTION: Antibodies
; FILE REFERENCE: 6989.US.O2
; CURRENT APPLICATION NUMBER: US/10/684,109
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 10/269,711
; PRIOR FILING DATE: 2002-10-14
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 86
; LENGTH: 1990
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-684-109-86

```

```

Query Match          76.3%; Score 399.8; DB 17; Length 1990;
Best Local Similarity 87.4%; Pred. No. 5.5e-117;
Matches 450; Conservative 0; Mismatches 62; Indels 3; Gaps 1;

```

```

Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTGTCTCAG 72
          ||||| || ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1  ATGAAGCATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCCCAG 60
Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
          ||||| || ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120
Qy      133 TGCCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
          ||| ||||| ||||| ||| ||||| ||||| ||||| ||||| ||||| |||||
Db      121 TGCCTGTCTCTGGTGCCTCCATCAGTAATTACTACTGGAGCTGGATCCGGCAGCCCCCA 180
Qy      193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCACCACTACAACCCG 252

```

```

      || ||||| ||||| ||||| || || || ||||| || || ||||| |||||
Db      181 GGG AAGG GACTGGAGTGGATTGGGTATGTCTCTTACAGTGGGAGTACGTACTACAACCCC 240

Qy      253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
      || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      241 TCCCTCAAGGGTCGAGTCACCATGTCTAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy      313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      301 CTGAGCTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAGAAAAAAGTGGGG 360

Qy      373 TT---CGACCCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGC 429
      | ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      361 ATTGGAGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGC 420

Qy      430 CCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG 489
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      421 CCATCGGTCTTCCCCCTGGCGCCCTGCTCTAGAAGCACCTCCGAGAGCACAGCCGCCCTG 480

Qy      490 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      481 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 515

```

RESULT 9

US-10-684-109-87/c

; Sequence 87, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

; TITLE OF INVENTION: Erythropoietin Receptor Binding

; TITLE OF INVENTION: Antibodies

; FILE REFERENCE: 6989.US.02

; CURRENT APPLICATION NUMBER: US/10/684,109

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14

; NUMBER OF SEQ ID NOS: 115

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 87

; LENGTH: 1990

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-684-109-87

```

Query Match          76.3%; Score 399.8; DB 17; Length 1990;
Best Local Similarity 87.4%; Pred. No. 5.5e-117;
Matches 450; Conservative 0; Mismatches 62; Indels 3; Gaps 1;

```

```

Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
      ||||| || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1990 ATGAAGCATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCAGATGGGTCCTGTCCCAG 1931

```


Query Match 75.9%; Score 397.6; DB 15; Length 1401;
 Best Local Similarity 86.4%; Pred. No. 2.5e-116;
 Matches 458; Conservative 0; Mismatches 54; Indels 18; Gaps 1;

```

Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTGTCTCAG 72
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1  ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     121 TGCCTGTCTCTGGTGGCTCCATCAGAAGTTACTACTGGACCTGGATCCGGCAGCCCCCA 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCACCACTACAACCCG 252
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     181 GGAAGGGACTGGAGTGGATTGGATATATCTATTACAGTGGGAGCACCACCACTACAATCCC 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACATGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA----- 360
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     301 CTGAGTTCTGTGACCGCTGCGGACACGGCCGTTTATTACTGTGCGAGAAAGGGTGACTAC 360

Qy     361 -----GTAATTAATTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA 414
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     361 GGTGGTAATTTTAACTACTTTCACCAAGTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA 420

Qy     415 GCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGG 474
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     421 GCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG 480

Qy     475 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     481 AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 530
  
```

RESULT 11

US-10-684-109-98

; Sequence 98, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

; TITLE OF INVENTION: Erythropoietin Receptor Binding

; TITLE OF INVENTION: Antibodies

; FILE REFERENCE: 6989.US.02

; CURRENT APPLICATION NUMBER: US/10/684,109

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 1990
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-684-109-98

Query Match 75.7%; Score 396.6; DB 17; Length 1990;
Best Local Similarity 87.0%; Pred. No. 5.8e-116;
Matches 448; Conservative 0; Mismatches 64; Indels 3; Gaps 1;

```
Qy      13  ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCGTGTCTCAG 72
          |||
Db      1  ATGAAACACCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCCGTGCCAG 60

Qy     173  GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
          |||
Db     161  GTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     213  TCGCTGTCTATGGTGGTTCCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
          |||
Db     212  TGCAGTGTCTCTGGTGTCTCCATCAGTAATTACTACTGGAGCTGGATCCGGCAGTCCCCA 180

Qy     293  GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
          |||
Db     281  GGAAGGGACTGGAGTGGATTGGATATATCTATTACAGTGGGAGTCCCTATTACAACCCC 240

Qy     353  TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
          |||
Db     341  TCCCTCAAGAGTCGAGTCACTATATCTGCAGACACGTCCAAGAACCAATTCTCCCTGAAG 300

Qy     413  CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
          |||
Db     401  CTGAGCTCTGTGACCGCTGCGGACACGGCCATTTATTACTGTGCGAGAGAAAACTGGGG 360

Qy     473  TT---CGACCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGC 429
          |||
Db     461  ATTGGAGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGC 420

Qy     533  CCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG 489
          |||
Db     521  CCATCGGTCTTCCCCCTGGCGCCCTGCTCTAGAAGCACCTCCGAGAGCACAGCCGCCCTG 480

Qy     593  GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
          |||
Db     581  GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 515
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RESULT 12

US-10-684-109-99/c
; Sequence 99, Application US/10684109
; Publication No. US20040175379A1
; GENERAL INFORMATION:
; APPLICANT: DeVries, Peter J.
; APPLICANT: Green, Larry L.

```
; APPLICANT: Ostrow, David H.
; APPLICANT: Reilly, Edward B.
; APPLICANT: Wieler, James
; TITLE OF INVENTION: Erythropoietin Receptor Binding
; TITLE OF INVENTION: Antibodies
; FILE REFERENCE: 6989.US.02
; CURRENT APPLICATION NUMBER: US/10/684,109
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 10/269,711
; PRIOR FILING DATE: 2002-10-14
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 99
; LENGTH: 1990
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-684-109-99
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Query Match          75.7%; Score 396.6; DB 17; Length 1990;
Best Local Similarity 87.0%; Pred. No. 5.8e-116;
Matches 448; Conservative 0; Mismatches 64; Indels 3; Gaps 1;
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Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTGTCTCAG 72
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Db      1990 ATGAAACACCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCCCAG 1931

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
        |||
Db      1930 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 1871

Qy     133 TGCCTGTCTATGGTGGTTCTTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
        |||
Db     1870 TGCCTGTCTCTGGTGTCTCCATCAGTAATTACTACTGGAGCTGGATCCGGCAGTCCCCA 1811

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAATCAATCATAGTGAAGCACCAACTACAACCCG 252
        ||
Db     1810 GGGAAGGGACTGGAGTGGATTGGATATATCTATTACAGTGGGAGTCCCTATTACAACCCC 1751

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
        ||
Db     1750 TCCCTCAAGAGTCGAGTCACTATATCTGCAGACACGTCCAAGAACCAATTCTCCCTGAAG 1691

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
        |||
Db     1690 CTGAGCTCTGTGACCGCTGCGGACACGGCCATTTATTACTGTGCGAGAGAAAACTGGGG 1631

Qy     373 TT---CGACCCCTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGC 429
        ||
Db     1630 ATTGGAGACTACTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGC 1571

Qy     430 CCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG 489
        |||
Db     1570 CCATCGGTCTTCCCCCTGGCGCCCTGCTCTAGAAGCACCTCCGAGAGCACAGCCGCCCTG 1511

Qy     490 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
        |||
Db     1510 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 1476
```

RESULT 13

US-10-292-088-21

; Sequence 21, Application US/10292088

; Publication No. US20030211100A1

; GENERAL INFORMATION:

; APPLICANT: BEDIAN, VAHE

; APPLICANT: GLADUE, RONALD P.

; APPLICANT: CORVALAN, JOSE

; APPLICANT: JIA, XIAO-CHI

; APPLICANT: FENG, XIAO

; TITLE OF INVENTION: ANTIBODIES TO CD40

; FILE REFERENCE: ABX-PF/3 US

; CURRENT APPLICATION NUMBER: US/10/292,088

; CURRENT FILING DATE: 2003-03-14

; PRIOR APPLICATION NUMBER: 60/348,980

; PRIOR FILING DATE: 2001-11-09

; NUMBER OF SEQ ID NOS: 147

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 21

; LENGTH: 1395

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-292-088-21

Query Match 74.9%; Score 392.4; DB 15; Length 1395;

Best Local Similarity 86.1%; Pred. No. 1.2e-114;

Matches 451; Conservative 0; Mismatches 61; Indels 12; Gaps 1;

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Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
      |||
Db      1 ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCAGATGGGTCCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
      |||
Db      61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTCCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
      |||
Db     121 TGCCTGTCTCTGGTGGCTCCATCAGTAGTTACTACTGGATCTGGATCCGGCAGCCCGCC 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
      |||
Db     181 GGGAAGGGACTGGAATGGATTGGGCGTGTCTATACCAGTGGGAGCACCAACTACAACCCC 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTTGAAA 312
      |||
Db     241 TCCCTCAAGAGTCGAGTCACCATGTCTAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATT-- 370
      |||
Db     301 CTGAGCTCTGTGACCGCCGCGGACACGGCCGTGTATTACTGTGCGAGAGATGGTCTTTAC 360

Qy     371 -----GGTTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 420
      |||
Db     361 AGGGGGTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCAGCCTCC 420

```



```

Qy      421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
      |||
Db      421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAGAGACA 480

Qy      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
      |||
Db      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524

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RESULT 14

US-09-972-656-65

; Sequence 65, Application US/09972656

; Publication No. US20030099647A1

; GENERAL INFORMATION:

; APPLICANT: Deshpande, Rajendra

; APPLICANT: Tsai, Mei-Mei

; TITLE OF INVENTION: Fully Human Antibody Fab Fragments with Human Interferon-Gamma

; TITLE OF INVENTION: Neutralizing Activity

; FILE REFERENCE: A-799

; CURRENT APPLICATION NUMBER: US/09/972,656

; CURRENT FILING DATE: 2001-10-05

; NUMBER OF SEQ ID NOS: 135

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 65

; LENGTH: 669

; TYPE: DNA

; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: CDS

; LOCATION: (1)..(669)

US-09-972-656-65

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Query Match          73.5%;  Score 385.2;  DB 10;  Length 669;
Best Local Similarity 90.9%;  Pred. No. 1.9e-112;
Matches 427;  Conservative 0;  Mismatches 28;  Indels 15;  Gaps 1;

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Qy      70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
      |||
Db      1  CAGGTGCAGCTGCAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 60

Qy     130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
      |||
Db      61 ACCTGCGCTGTCTATGGTGGGTCCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCC 120

Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAAC 249
      |||
Db     121 CCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAAGCACCAACTACAAC 180

Qy     250 CCGTCTCTCAAGAGTTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG 309
      |||
Db     181 CCGTCCCTCAAGAGTTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTG 240

Qy     310 AAAGTGAAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAG----- 361
      |||
Db     241 AAGCTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGCCGGGCA 300

```


; SEQUENCE DESCRIPTION: SEQ ID NO: 1
US-10-194-801C-1

Query Match 73.5%; Score 385.2; DB 15; Length 2674;
Best Local Similarity 83.8%; Pred. No. 2.7e-112;
Matches 469; Conservative 0; Mismatches 43; Indels 48; Gaps 1;

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Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
      |||
Db      1 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60

Qy     73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
      |||
Db     61 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy    133 TGCCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
      |||
Db    121 TGCCTGTCTATGGTGGTTCCTTCAGTGGTCACTACTGGAGTTGGATCCGCCAGCCCCCA 180

Qy    193 GGTAAGGGTCTGGAGTGGATTGGTGAATCAATCATAGTGAAGCACCAACTACAACCCG 252
      |||
Db    181 GGAAGGGGCTGGAGTGGATTGGAGAAATCGATCATAGTGAAGCACCAATTACAACCCG 240

Qy    253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
      |||
Db    241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCGTGAAG 300

Qy    313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTG- 371
      |||
Db    301 CTGACCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAAGCCGGCATTGT 360

Qy    372 -----GTTCGACCCTTGG 384
      |||
Db    361 ACAAGTATCAGCTGTTTTTCAGTATTATTTAGGATACTACTACTACTACATGGACGTCTGG 420

Qy    385 GGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCC 444
      |||
Db    421 GGCAAGGGGACCACGGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCATCGGTCTTCCCC 480

Qy    445 CTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAG 504
      |||
Db    481 CTGGCGCCCTGCTCCAGGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAG 540

Qy    505 GACTACTTCCCCGAACCGGT 524
      |||
Db    541 GACTACTTCCCCGAACCGGT 560
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Search completed: December 3, 2004, 02:43:23
Job time : 403.747 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 12:19:03 ; Search time 2727.54 Seconds
 (without alignments)
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Title: US-08-728-463B-219
 Perfect score: 524
 Sequence: 1 AAGCTTGCCACCATGAAACA.....GACTACTTCCCCGAACCGGT 524

Scoring table: IDENTITY_NUC
 Gapop 10.0 , Gapext 1.0

Searched: 32822875 seqs, 18219865908 residues

Total number of hits satisfying chosen parameters: 65645750

Minimum DB seq length: 0
 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
 Maximum Match 100%
 Listing first 45 summaries

Database : EST:*
 1: gb_est1:*
 2: gb_est2:*
 3: gb_htc:*
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 5: gb_est4:*
 6: gb_est5:*
 7: gb_est6:*
 8: gb_gss1:*
 9: gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query		DB	ID	Description
		Match	Length			
1	449.4	85.8	980	5	BQ706553	BQ706553 AGENCOURT
2	438	83.6	931	5	BQ707803	BQ707803 AGENCOURT
3	432	82.4	931	5	BQ878887	BQ878887 AGENCOURT
4	421.4	80.4	987	5	BQ710722	BQ710722 AGENCOURT
5	419	80.0	918	5	BQ706212	BQ706212 AGENCOURT
6	419	80.0	974	5	BQ705980	BQ705980 AGENCOURT
7	417.6	79.7	936	5	BQ708110	BQ708110 AGENCOURT
8	416.8	79.5	901	5	BQ711045	BQ711045 AGENCOURT
9	416.8	79.5	922	5	BQ710311	BQ710311 AGENCOURT
10	416.8	79.5	943	5	BQ712501	BQ712501 AGENCOURT
11	415.4	79.3	796	5	BQ707968	BQ707968 AGENCOURT
12	408.4	77.9	971	5	BQ882187	BQ882187 AGENCOURT
13	405.8	77.4	1001	5	BQ712107	BQ712107 AGENCOURT
14	404.6	77.2	911	5	BQ711708	BQ711708 AGENCOURT
15	403.8	77.1	912	5	BQ709996	BQ709996 AGENCOURT

16	403.6	77.0	949	5	BQ711114	BQ711114	AGENCOURT
17	403.2	76.9	943	5	BQ898973	BQ898973	AGENCOURT
18	403	76.9	932	5	BQ709785	BQ709785	AGENCOURT
19	402.8	76.9	844	4	BI489640	BI489640	603032108
20	402.8	76.9	855	5	BQ707083	BQ707083	AGENCOURT
21	402.4	76.8	866	5	BQ709485	BQ709485	AGENCOURT
22	402	76.7	920	5	BQ716897	BQ716897	AGENCOURT
23	401.8	76.7	903	5	BQ706579	BQ706579	AGENCOURT
24	401.6	76.6	973	5	BQ709500	BQ709500	AGENCOURT
25	400.4	76.4	951	5	BQ709739	BQ709739	AGENCOURT
26	399.6	76.3	913	5	BQ708291	BQ708291	AGENCOURT
27	399	76.1	961	5	BQ709221	BQ709221	AGENCOURT
28	396.8	75.7	921	5	BQ710000	BQ710000	AGENCOURT
29	396.8	75.7	954	5	BQ716910	BQ716910	AGENCOURT
30	396.6	75.7	672	6	CD703774	CD703774	EST20301
31	396.6	75.7	1048	5	BQ710742	BQ710742	AGENCOURT
32	396.4	75.6	938	5	BQ710911	BQ710911	AGENCOURT
33	395	75.4	857	4	BG682200	BG682200	602629507
34	394	75.2	830	4	BM008496	BM008496	603617496
35	393.6	75.1	951	5	BQ898539	BQ898539	AGENCOURT
36	393.2	75.0	932	5	BQ707613	BQ707613	AGENCOURT
37	392.6	74.9	889	4	BG758751	BG758751	602713110
38	392.4	74.9	883	5	BQ711937	BQ711937	AGENCOURT
39	390.6	74.5	924	5	BQ708516	BQ708516	AGENCOURT
40	390.4	74.5	948	4	BM007780	BM007780	603617239
41	388.8	74.2	935	5	BQ710683	BQ710683	AGENCOURT
42	387.4	73.9	509	2	AW406349	AW406349	UI-HF-BLO
43	387.4	73.9	888	5	BQ708773	BQ708773	AGENCOURT
44	387.4	73.9	937	5	BQ709778	BQ709778	AGENCOURT
45	387.2	73.9	974	4	BM914396	BM914396	AGENCOURT

ALIGNMENTS

RESULT 1

BQ706553

LOCUS BQ706553 980 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8487920 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6300742
5', mRNA sequence.

ACCESSION BQ706553

VERSION BQ706553.1 GI:21845452

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 980)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Db 436 AAGGGCCCCATCGGTCTTCCCCCTGGCACCTCCTCCAAGAGCACCTCTGGGGGCACAGCA 495

Qy 484 GCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||||

Db 496 GCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 536

RESULT 2

BQ707803

LOCUS BQ707803 931 bp mRNA linear EST 16-JUL-2002
 DEFINITION AGENCOURT_8353015 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6278020
 5', mRNA sequence.

ACCESSION BQ707803

VERSION BQ707803.1 GI:21846702

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 931)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>

Plate: LLCM2465 row: f column: 05

High quality sequence stop: 736.

FEATURES

source

Location/Qualifiers

1..931

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:6278020"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
 EcoRI; cDNA made by oligo-dT priming. Directionally cloned
 into EcoRI/XhoI sites using the following 5' adaptor:
 GGCACGAG(G). Library constructed by Ling Hong in the
 laboratory of Gerald M. Rubin (University of California,
 Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
 Superscript II RT (Life Technologies). Note: this is a
 NIH_MGC Library."

ORIGIN

Query Match 83.6%; Score 438; DB 5; Length 931;

Best Local Similarity 90.4%; Pred. No. 1.7e-112;

Matches 490; Conservative 0; Mismatches 25; Indels 27; Gaps 1;

Qy 10 ACCATGAAACACCTGTGGTTCTTCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT 69

Db	23		AACATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCC	82
Qy	70		CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC	129
Db	83		CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC	142
Qy	130		ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA	189
Db	143		ACCTGCGCTGTCCATGGCGGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCC	202
Qy	190		CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAAC	249
Db	203		CCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAAC	262
Qy	250		CCGTCTCTCAAGAGTCGAGTCAACATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG	309
Db	263		CCGTCCCTCAAGAGTCGAGTCAACATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTG	322
Qy	310		AAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAG-----	359
Db	323		AAGCTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGACGACATCGG	382
Qy	360		-----AGTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTC	402
Db	383		CTATGGTTCGGGGACTTATTCTGTTCTCCTGGTTCGACCCCTGGGGCCAGGGAACCCCTGGTC	442
Qy	403		ACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG	462
Db	443		ACCGTGTCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG	502
Qy	463		AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG	522
Db	503		AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG	562
Qy	523		GT 524	
Db	563		GT 564	

RESULT 3

BQ878887

LOCUS BQ878887 931 bp mRNA linear EST 16-AUG-2002

DEFINITION AGENCOURT_8119707 Lupski_dorsal_root_ganglion Homo sapiens cDNA clone IMAGE:6177774 5', mRNA sequence.

ACCESSION BQ878887

VERSION BQ878887.1 GI:22270895

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 931)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Qy 310 AACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAAT 369
 || |||||
 Db 334 AAGCTGAGCTCTGTGACCGCCGCGGACACGGCTCTGTATTACTGTGCGAGAGGTGTGCTT 393
 Qy 370 TGG-----TTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
 || |||||
 Db 394 TCGTTGTACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCC 453
 Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 |||||
 Db 454 ACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGTCTCCAGGAGCACCTCCGAGAGCACA 513
 Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||||
 Db 514 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 557

RESULT 4

BQ710722

LOCUS BQ710722 987 bp mRNA linear EST 16-JUL-2002
 DEFINITION AGENCOURT_8292332 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6280863
 5', mRNA sequence.

ACCESSION BQ710722

VERSION BQ710722.1 GI:21849621

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 987)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2472 row: 1 column: 16

High quality sequence stop: 530.

FEATURES

source

Location/Qualifiers

1..987

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:6280863"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
 EcoRI; cDNA made by oligo-dT priming. Directionally cloned
 into EcoRI/XhoI sites using the following 5' adaptor:
 GGCACGAG(G). Library constructed by Ling Hong in the

laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 80.4%; Score 421.4; DB 5; Length 987;
 Best Local Similarity 88.6%; Pred. No. 8.3e-108;
 Matches 483; Conservative 0; Mismatches 26; Indels 36; Gaps 1;

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Qy      76 CAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGC 135
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Qy     196 AAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCGTCT 255
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Db     181 AAGGGACTGGAGTGGATTGGGGAAATCAATCATAGTGGAAGCACCAACTACAACCCGTCC 240

Qy     256 CTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAACTG 315
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Db     241 CTCAAGAGTCGAGTCACCATATCACTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTG 300

Qy     316 AGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTA----- 367
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Db     301 AGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGACGGAAAACCTATTAT 360

Qy     368 -----ATTGGTTCGACCCTTGGGGCCAGGGAACCCCTG 399
      || || || |||
Db     361 GATTACGTTTGGGGGAGTTATCGTCCCCCTTTACTTTGACTACTGGGGCCAGGGAACGCTG 420

Qy     400 GTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCC 459
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Db     421 GTCACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCC 480

Qy     460 AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA 519
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Db     481 AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA 540

Qy     520 CCGGT 524
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Db     541 CCGGT 545
  
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RESULT 5

BQ706212

LOCUS BQ706212 918 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8353247 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6278226 5', mRNA sequence.

ACCESSION BQ706212

VERSION BQ706212.1 GI:21845111
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 918)
 AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Dr. Mark Watson
 cDNA Library Preparation: Rubin Laboratory
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Agencourt Bioscience Corporation
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LLCM2465 row: n column: 19
 High quality sequence stop: 649.
 FEATURES Location/Qualifiers
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 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:6278226"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="NIH_MGC_113"
 /note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
 EcoRI; cDNA made by oligo-dT priming. Directionally cloned
 into EcoRI/XhoI sites using the following 5' adaptor:
 GGCACGAG(G). Library constructed by Ling Hong in the
 laboratory of Gerald M. Rubin (University of California,
 Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
 Superscript II RT (Life Technologies). Note: this is a
 NIH_MGC Library."

ORIGIN

Query Match 80.0%; Score 419; DB 5; Length 918;
 Best Local Similarity 88.1%; Pred. No. 3.9e-107;
 Matches 480; Conservative 0; Mismatches 35; Indels 30; Gaps 1;

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Qy      10 ACCATGAAACACCTGTGGTTCTTCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTGTCT 69
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Db      18 AACATGAAACACCTGTGGTTCTTCTCCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCC 77

Qy      70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
      |||||
Db      78 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 137

Qy     130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
      |||||
Db     138 ACCTGCGCTGTCTATGGTGGGTTCCTTCAGTGATTACTACTGGACCTGGATCCGCCAGTCC 197

Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAAC 249
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Db	198	CCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAAGCAGCAACTACAAC	257
Qy	250	CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG	309
Db	258	CCGTCCCTCAAGAGTCGAGTCACCATGTCAGTAGACACGTCCAAGAACCAGTTCTCCCTG	317
Qy	310	AAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAAT----	365
Db	318	AAGTTGAGTTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTACGAGGGGTATCGGG	377
Qy	366	-----TAATTGGTTCGACCCTTGGGGCCAGGGAACCCTG	399
Db	378	GCCATTCTTGGAGTCGTAAAGACCCCCGCACGGCCTGACTATTGGGGCCAGGGAGCCCTG	437
Qy	400	GTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCC	459
Db	438	GTCACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCC	497
Qy	460	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA	519
Db	498	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA	557
Qy	520	CCGGT	524
Db	558	CCGGT	562

RESULT 6

LOCUS	BQ705980	974 bp	mRNA	linear	EST 16-JUL-2002
DEFINITION	AGENCOURT_8351717 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6282235 5', mRNA sequence.				

VERSION BQ705980.1 GI:21844879

SOURCE Homo sapiens (human)

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

JOURNAL Unpublished (1999)

Email: cqapbs-r@mail.nih.gov

cDNA Library Preparation: Rubin Laboratory

DNA Sequencing by: Agencourt Bioscience Corporation

http://image.llnl.gov
Plate: LLCM2476 row: e column: 20

FEATURES	Location/Qualifiers
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/organism="Homo sapiens"
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/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6282235"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NIH_MGC_113"
/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
EcoRI; cDNA made by oligo-dT priming. Directionally cloned
into EcoRI/XhoI sites using the following 5' adaptor:
GGCACGAG(G). Library constructed by Ling Hong in the
laboratory of Gerald M. Rubin (University of California,
Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
Superscript II RT (Life Technologies). Note: this is a
NIH_MGC Library."

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ORIGIN

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Query Match          80.0%;  Score 419;  DB 5;  Length 974;
Best Local Similarity 88.1%;  Pred. No. 4e-107;
Matches 480;  Conservative 0;  Mismatches 35;  Indels 30;  Gaps 1;

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Db      30 AACATGAAACACCTGTGGTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCC 89

Qy      70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      90 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 149

Qy     130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGTTACTACTGGAGCTGGATCCGCCAGCCA 189
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     150 ACCTGCGCTGTCTATGGTGGGTCCCTTCAGTGATTACTACTGGACCTGGATCCGCCAGTCC 209

Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAAC 249
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     210 CCAGGGAAGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAAGCAGCAACTACAAC 269

Qy     250 CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG 309
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     270 CCGTCCCTCAAGAGTCGAGTCACCATGTCTAGTAGACACGTCCAAGAACCAGTTCTCCCTG 329

Qy     310 AAAGTGAAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAAT---- 365
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     330 AAGTTGAGTTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTACGAGGGGTATCGGG 389

Qy     366 -----TAATTGGTTCGACCCTTGCGGCCAGGGAACCCTG 399
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     390 GCCATTCTTGAGTCGTAAAGACCCCCGCACGGCCTGACTATTGGGGCCAGGGAGCCCTG 449

Qy     400 GTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCC 459
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Db     450 GTCACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCC 509

Qy     460 AAGAGCACCTCTGGGGGACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA 519
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Db     510 AAGAGCACCTCTGGGGGACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA 569

Qy     520 CCGGT 524
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Db 570 CCGGT 574 .

RESULT 7

BQ708110

LOCUS BQ708110 936 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8354095 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6278615
5', mRNA sequence.

ACCESSION BQ708110

VERSION BQ708110.1 GI:21847009

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 936)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2466 row: n column: 24

High quality sequence stop: 552.

FEATURES

source Location/Qualifiers

1. .936

/organism="Homo sapiens"

/mol_type="mRNA"

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/clone="IMAGE:6278615"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
EcoRI; cDNA made by oligo-dT priming. Directionally cloned
into EcoRI/XhoI sites using the following 5' adaptor:
GGCACGAG(G). Library constructed by Ling Hong in the
laboratory of Gerald M. Rubin (University of California,
Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
Superscript II RT (Life Technologies). Note: this is a
NIH_MGC Library."

ORIGIN

Query Match 79.7%; Score 417.6; DB 5; Length 936;

Best Local Similarity 87.8%; Pred. No. 9.7e-107;

Matches 481; Conservative 0; Mismatches 34; Indels 33; Gaps 1;

Qy 10 ACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT 69

Db 23 AACATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCC 82

Qy 70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129

DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
Plate: LLCM2384 row: j column: 08
High quality sequence stop: 653.

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FEATURES             Location/Qualifiers
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                        /clone="IMAGE:6215527"
                        /lab_host="DH10B (phage-resistant)"
                        /clone_lib="NIH_MGC_113"
                        /note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
EcoRI; cDNA made by oligo-dT priming. Directionally cloned
into EcoRI/XhoI sites using the following 5' adaptor:
GGCACGAG(G). Library constructed by Ling Hong in the
laboratory of Gerald M. Rubin (University of California,
Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
Superscript II RT (Life Technologies). Note: this is a
NIH MGC Library."
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ORIGIN

Query Match 79.5%; Score 416.8; DB 5; Length 901;
Best Local Similarity 88.2%; Pred. No. 1.6e-106;
Matches 473; Conservative 0; Mismatches 42; Indels 21; Gaps 1;

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Qy      469 TCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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Db      501 TCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 556
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RESULT 9

BQ710311

LOCUS BQ710311 922 bp mRNA linear EST 16-JUL-2002
 DEFINITION AGENCOURT_8418290 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6281411
 5', mRNA sequence.

ACCESSION BQ710311

VERSION BQ710311.1 GI:21849210

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 922)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2474 row: c column: 12

High quality sequence stop: 713.

FEATURES

source

Location/Qualifiers

1..922

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:6281411"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
 EcoRI; cDNA made by oligo-dT priming. Directionally cloned
 into EcoRI/XhoI sites using the following 5' adaptor:
 GGCACGAG(G). Library constructed by Ling Hong in the
 laboratory of Gerald M. Rubin (University of California,
 Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
 Superscript II RT (Life Technologies). Note: this is a
 NIH_MGC Library."

ORIGIN

Query Match 79.5%; Score 416.8; DB 5; Length 922;

Best Local Similarity 88.2%; Pred. No. 1.6e-106;

Matches 473; Conservative 0; Mismatches 42; Indels 21; Gaps 1;

[illegible]

RESULT 10

BO712501

LOCUS	BQ712501	943 bp	mRNA	linear	EST 16-JUL-2002
DEFINITION	AGENCOURT_8501535 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6303038 5', mRNA sequence.				

ACCESSION BQ712501

VERSION BO712501.1 GI:21851400

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 943)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory


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Qy      409 TCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACC 468
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Qy      469 TCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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RESULT 11

BQ707968

LOCUS BQ707968 796 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8347274 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6279293 5', mRNA sequence.

ACCESSION BQ707968

VERSION BQ707968.1 GI:21846880

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 796)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2468 row: k column: 06

High quality sequence stop: 552.

FEATURES

source

Location/Qualifiers

1..796

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:6279293"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 79.3%; Score 415.4; DB 5; Length 796;
 Best Local Similarity 88.4%; Pred. No. 3.9e-106;
 Matches 471; Conservative 0; Mismatches 41; Indels 21; Gaps 1;

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 Db 23 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCCCAG 82

Qy 73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
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 Db 83 ATGCACCTACAACAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 142

Qy 133 TGCCTGTCTATGGTGGTTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
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 Db 143 TGCCTGTCTCTGGTGGGTCTTCAGTGGTTACTACTGGAGCTGGGTCCGCCAGTCCCCA 202

Qy 193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
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 Db 203 GGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAACCACCGACTACAACCCG 262

Qy 253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
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 Db 263 TCCCTCAAGAGTCGAGTCACCATATCAGTCGACGCGTCCAAAAGCAATTCTCCCTGATG 322

Qy 313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAA---- 368
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 Db 323 CTGACGTCTGTGACCGCCGCGGACACGGGTGTCTATTATTGTGGGAGACTTATTTACGCA 382

Qy 369 -----TTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCC 411
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 Db 383 CTTTGGAGAGCCCGATCCGCGTTCGACCACTGGGGCCAGGGAACCCTGGTCACCGTCTCC 442

Qy 412 TCAGCCTCAACCAAGGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCT 471
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 Db 443 TCAGCCTCCACCAAGGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCT 502

Qy 472 GGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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 Db 503 GGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 555

RESULT 12

BQ882187

LOCUS BQ882187 971 bp mRNA linear EST 16-AUG-2002

DEFINITION AGENCOURT_8493980 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6302549 5', mRNA sequence.

ACCESSION BQ882187

VERSION BQ882187.1 GI:22274195

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 971)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Agencourt Bioscience Corporation
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LLCM2520 row: d column: 06
 High quality sequence start: 7
 High quality sequence stop: 581.

FEATURES	Location/Qualifiers
source	1. .971 /organism="Homo sapiens" /mol_type="mRNA" /db_xref="taxon:9606" /clone="IMAGE:6302549" /lab_host="DH10B (phage-resistant)" /clone_lib="NIH MGC 113" /note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 77.9%; Score 408.4; DB 5; Length 971;
 Best Local Similarity 86.5%; Pred. No. 3.9e-104;
 Matches 479; Conservative 0; Mismatches 36; Indels 39; Gaps 1;

Qy	10	ACCATGAAACACCTGTGGTTCTTCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTGTCT	69
Db	48	AACATGAAACACCTGTGGTTCTTCTCCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCC	107
Qy	70	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC	129
Db	108	CAGGTGCAGCTACAACAGTGGGGCGCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTC	167
Qy	130	ACCTGCGCTGTCTATGGTGGTTCTTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA	189
Db	168	ACCTGCGCTGTCTTTGGTGGGTCCTTCAGTGGTTACTACTGGACTTGGATCCGCCAGTCC	227
Qy	190	CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAAC	249
Db	228	CCAGTGAAGGGGCTGGAGTGGATTGGGGAAATCGATCATAGTGAAGCACCAACTACAAC	287
Qy	250	CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG	309
Db	288	CCGTCCCTCAAGAGTCGAGTCACCATATCAGGAGACACGTCCAAGAAGCTATTCTCCCTG	347
Qy	310	AAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAAT	369
Db	348	AAGGTGACCTCTATGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGCCCTCGGT	407
Qy	370	T-----GGTTCGACCCTTGGGGCCAG	390

Db 408 TCGATTGTTGGCGTGATGAAAGCCGTCGGGCGCGGAAGGGGGTTTCGACCCCTGGGGCCAG 467
 Qy 391 GGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCA 450
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 Db 468 GGAACCCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCA 527
 Qy 451 CCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTAC 510
 |||
 Db 528 CCCTCCTCCAAGAGCACCTCTGGGGGCACAGCAGCCCTGGGCTGCCTGGTCAAGGACTAC 587
 Qy 511 TTCCCCGAACCGGT 524
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 Db 588 TTCCCCGAACCGGT 601

RESULT 13

BQ712107

LOCUS BQ712107 1001 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8354049 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6278301 5', mRNA sequence.

ACCESSION BQ712107

VERSION BQ712107.1 GI:21851006

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1001)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2466 row: a column: 22

High quality sequence stop: 495.

FEATURES

source

Location/Qualifiers

1. .1001

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:6278301"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a

ORIGIN

[illegible]

BO711708

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LOCUS      BQ711708                      911 bp      mRNA      linear      EST 16-JUL-2002
DEFINITION AGENCOURT_8475090 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6301572
            5', mRNA sequence.
ACCESSION  BQ711708
VERSION    BQ711708.1  GI:21850607
KEYWORDS   EST.
SOURCE     Homo sapiens (human)
  ORGANISM Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1  (bases 1 to 911)

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AUTHORS	NIH-MGC http://mgc.nci.nih.gov/ .
TITLE	National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL	Unpublished (1999)
COMMENT	Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov Tissue Procurement: Dr. Mark Watson cDNA Library Preparation: Rubin Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: LLCM2517 row: k column: 13 High quality sequence stop: 630.

ORIGIN

Qy	13	ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG	72
Db	17	ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAg	76
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACc	132
Db	77	GTGCAGCTGCAGGAGTCGGGGCCcAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACc	136
Qy	133	TGCGCTGTCTATGGTGGTTCTTCAGTG GTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	137	TGCACTGTCTCTGGTGGCTCCACCAGTAGTTACTACTGGAGCTGGATCCGGCAGCCCCGCC	196
Qy	193	GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCG	252
Db	197	GGGAAGGGACTGGAGTGGATTGGACGTATCTATAACCAGTGGGAGCACCGACTACAACCCC	256
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	257	TCCCTCAAGAGTCGAGTCAACATGTCAATTGACACGTCCAAGAAACAGTTCTCCCTGAAG	316
Qy	313	CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAG---AGTAATTAAT	369

Db	317	CTGACCTCTGTGACCGCCGCGGACACGGCCGTATATTATTGTGCGCGTTTCGTCGTCCGGT	376
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Db	377	TGGTTTGACTACTGGGGCCAGGGAACGCTGGTCAACCGTCTCCTCAGCCTCCACCAAGGGC	436
Qy	430	CCATCGGTCTTCCCCCTGGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG	489
Db	437	CCATCGGTCTTCCCCCTGGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG	496
Qy	490	GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	497	GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	531

RESULT 15

BQ709996

LOCUS	BQ709996	912 bp	mRNA	linear	EST 16-JUL-2002
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DEFINITION AGENCOURT_8474918 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6301657
5', mRNA sequence.

ACCESSION BQ709996

VERSION BQ709996.1 GI:21848895

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 912)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2517 row: 0 column: 02

High quality sequence stop: 579.

FEATURES

source

Location/Qualifiers

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/organism="Homo sapiens"
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/mol type="mRNA"
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/db xref="taxon:9606"
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/clone="IMAGE:6301657"
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/lab host="DH10B (phage-resistant)"
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/clone lib="NIH MGC 113"
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/note="Organ: spleen; Vector: pOTB7; Site 1: XhoI; Site 2:
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EcoRI; cDNA made by oligo-dT priming. Directionally cloned

into EcoRI/XhoI sites using the following 5' adaptor:

GGCACGAG(G). Library constructed by Ling Hong in the

laboratory of Gerald M. Rubin (University of California,

Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and

Superscript II RT (Life Technologies). Note: this is a
NIH_MGC Library."

ORIGIN

Query Match 77.1%; Score 403.8; DB 5; Length 912;
Best Local Similarity 85.8%; Pred. No. 7.7e-103;
Matches 478; Conservative 0; Mismatches 37; Indels 42; Gaps 1;

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Db      21 AACATGAAACACCTGTGGTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCC 80

Qy      70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      81 CAGGTGCAGTTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 140

Qy     130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGTTACTACTGGAGCTGGATCCGCCAGCCA 189
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     141 ACCTGCGCTGTCTATGGTGGGTCCCTTCAGTGTTGCTACTGGACCTGGATCCGCCAGTCC 200

Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAAC 249
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Db     201 CCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGAACACCACCTACAAC 260

Qy     250 CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG 309
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     261 CCGTCCCTCAAGAGTCGCGTCACCATATCAATAGACACGTCCAAGAATCAGTTCTCCCTG 320

Qy     310 AAAGTGAAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA----- 360
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     321 AAAGTGAAGTTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGCTGGGCC 380

Qy     361 -----GTAATTAATTGGTTCGACCCTTGGGGC 387
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     381 CCGGCCTCTTGGGTGGTTTTGGAGTGGTTCGACGCGCCACAGCTTTGACTACTGGGGC 440

Qy     388 CAGGGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTG 447
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Db     441 CAGGGAACCCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTG 500

Qy     448 GCACCTCTCTCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGAC 507
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Db     501 GCACCTCTCTCAAGAGCACCTCTGGGGGCACAGCAGCCCTGGGCTGCCTGGTCAAGGAC 560

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Job time : 2730.54 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 12:19:02 ; Search time 2246.9 Seconds
(without alignments)
8839.572 Million cell updates/sec

Title: US-08-728-463B-220
Perfect score: 420
Sequence: 1 AAGCTTGCCACCATGATGGT.....TGGCTGCACCATCTGTCTTC 420

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 4526729 seqs, 23644849745 residues

Total number of hits satisfying chosen parameters: 9053458

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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2: gb_htg:*
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4: gb_om:*
5: gb_ov:*
6: gb_pat:*
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8: gb_pl:*
9: gb_pr:*
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11: gb_sts:*
12: gb_sy:*
13: gb_un:*
14: gb_vi:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Query					
No.	Score	Match	Length	DB	ID	Description
1	420	100.0	420	6	AR161429	AR161429 Sequence
2	420	100.0	420	6	AR369974	AR369974 Sequence
3	420	100.0	420	6	BD096608	BD096608 Transgeni

4	420	100.0	3819	6	AR161402	AR161402 Sequence
5	420	100.0	3819	6	AR369997	AR369997 Sequence
6	420	100.0	3819	6	BD096631	BD096631 Transgeni
7	373.8	89.0	824	9	AY510107	AY510107 Homo sapi
8	373.8	89.0	936	9	BC073764	BC073764 Homo sapi
9	370.6	88.2	974	6	AX305000	AX305000 Sequence
10	370.6	88.2	974	6	AX306529	AX306529 Sequence
11	370.6	88.2	974	6	BD131246	BD131246 Human mon
12	369	87.9	433	9	S59162	S59162 Ig V kappa
13	368.6	87.8	388	6	AR161375	AR161375 Sequence
14	368.6	87.8	388	6	AR369968	AR369968 Sequence
15	368.6	87.8	388	6	BD096602	BD096602 Transgeni
16	365.8	87.1	728	6	BD182353	BD182353 Anti CD40
17	365.8	87.1	728	6	AX327729	AX327729 Sequence
18	362.6	86.3	716	6	AX327727	AX327727 Sequence
19	357.8	85.2	439	6	AR161377	AR161377 Sequence
20	357.8	85.2	439	6	AR369970	AR369970 Sequence
21	357.8	85.2	439	6	BD096604	BD096604 Transgeni
22	346.4	82.5	986	9	BC067092	BC067092 Homo sapi
23	343.4	81.8	827	9	AY510106	AY510106 Homo sapi
24	343.4	81.8	928	9	AK129817	AK129817 Homo sapi
25	340.2	81.0	711	6	CQ795434	CQ795434 Sequence
26	340.2	81.0	953	9	BC005332	BC005332 Homo sapi
27	340.2	81.0	962	9	BC034141	BC034141 Homo sapi
28	338.6	80.6	979	9	BC073763	BC073763 Homo sapi
29	337	80.2	438	6	BD015544	BD015544 Human mon
30	337	80.2	438	6	BD094922	BD094922 Human mon
31	335.4	79.9	429	9	HUMIGKW	M74019 Homo sapien
32	335.2	79.8	729	6	E40896	E40896 Humanized a
33	335.2	79.8	729	6	BD090625	BD090625 Drug cont
34	332.2	79.1	714	6	BD185290	BD185290 Uses of a
35	332.2	79.1	714	6	BD273726	BD273726 Human mon
36	332.2	79.1	714	6	AR454403	AR454403 Sequence
37	332.2	79.1	714	6	AX616570	AX616570 Sequence
38	332.2	79.1	956	9	BC029444	BC029444 Homo sapi
39	331.8	79.0	391	9	HSIGKLV57	X72478 H.sapiens m
40	330.6	78.7	948	9	BC073791	BC073791 Homo sapi
41	330.6	78.7	960	9	BC056256	BC056256 Homo sapi
42	329	78.3	817	6	BD248702	BD248702 Immunoglo
43	326.6	77.8	430	9	AF417853	AF417853 Homo sapi
44	325.8	77.6	944	6	AX067344	AX067344 Sequence
45	325.8	77.6	19040	6	BD075127	BD075127 Method fo

ALIGNMENTS

RESULT 1

AR161429

LOCUS AR161429 420 bp DNA linear PAT 17-OCT-2001

DEFINITION Sequence 420 from patent US 6255458.

ACCESSION AR161429

VERSION AR161429.1 GI:16227307

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 420)
 AUTHORS Lonberg,N. and Kay,R.M.
 TITLE High affinity human antibodies and human antibodies against digoxin
 JOURNAL Patent: US 6255458-A 420 03-JUL-2001;
 FEATURES Location/Qualifiers
 source 1. .420
 /organism="unknown"
 /mol_type="unassigned DNA"

ORIGIN

Query Match 100.0%; Score 420; DB 6; Length 420;
 Best Local Similarity 100.0%; Pred. No. 3.3e-129;
 Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy     61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120
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Qy    241 GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC 300
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Db    241 GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC 300

Qy    301 AGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTAC 360
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Db    301 AGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTAC 360

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RESULT 2

AR369974
 LOCUS AR369974 420 bp DNA linear PAT 12-SEP-2003
 DEFINITION Sequence 220 from patent US 6300129.
 ACCESSION AR369974
 VERSION AR369974.1 GI:34606414
 KEYWORDS .
 SOURCE Unknown.
 ORGANISM Unknown.
 Unclassified.
 REFERENCE 1 (bases 1 to 420)
 AUTHORS Lonberg,N. and Kay,R.M.
 TITLE Transgenic non-human animals for producing heterologous antibodies
 JOURNAL Patent: US 6300129-A 220 09-OCT-2001;

FEATURES Location/Qualifiers
 source 1. .420
 /organism="unknown"
 /mol_type="genomic DNA"

ORIGIN

Query Match 100.0%; Score 420; DB 6; Length 420;
Best Local Similarity 100.0%; Pred. No. 3.3e-129;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy         61  GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA  120
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Qy         121  GACAGAGTCACCATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT  180
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RESULT 3

BD096608

LOCUS BD096608 420 bp DNA linear PAT 27-AUG-2002

DEFINITION Transgenic non-human animals capable of producing heterologous
 antibodies.

ACCESSION BD096608

VERSION BD096608.1 GI:22642196

KEYWORDS JP 2001527386-A/135.

SOURCE unidentified

 ORGANISM unidentified
 unclassified.

REFERENCE 1 (bases 1 to 420)

 AUTHORS Lonberg,N. and Kay,R.M.

 TITLE Transgenic non-human animals capable of producing heterologous
 antibodies

 JOURNAL Patent: JP 2001527386-A 135 25-DEC-2001;

 GENPHARM INTERNATIONAL

COMMENT OS Unidentified

PN JP 2001527386-A/135
 PD 25-DEC-2001
 PF 01-DEC-1997 JP 1998525687
 PR 02-DEC-1996 US 08/758417
 PI NILS LONBERG, ROBERT M KAY
 PC C12N5/00, C12N5/28, C12N5/24, C12N5/10, C07K16/00, A61K39/00 CC
 Strandedness: Single;
 CC Topology: Linear;
 CC Transgenic non-human animals capable of
 producing heterologous
 CC antibodies
 FH Key Location/Qualifiers
 FT source 1. .420
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FEATURES Location/Qualifiers
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ORIGIN

Query Match 100.0%; Score 420; DB 6; Length 420;
 Best Local Similarity 100.0%; Pred. No. 3.3e-129;
 Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA	60
Db	1	AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA	60
Qy	61	GTTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA	120
Db	61	GTTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA	120
Qy	121	GACAGAGTCACCATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT	180
Db	121	GACAGAGTCACCATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT	180
Qy	181	CAGCATAAACCAGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGT	240
Db	181	CAGCATAAACCAGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGT	240
Qy	241	GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC	300
Db	241	GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC	300
Qy	301	AGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTAC	360
Db	301	AGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTAC	360
Qy	361	ACTTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC	420
Db	361	ACTTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC	420

RESULT 4

AR161402

LOCUS AR161402 3819 bp DNA linear PAT 17-OCT-2001

DEFINITION Sequence 393 from patent US 6255458.
 ACCESSION AR161402
 VERSION AR161402.1 GI:16227274
 KEYWORDS .
 SOURCE Unknown.
 ORGANISM Unknown.
 Unclassified.
 REFERENCE 1 (bases 1 to 3819)
 AUTHORS Lonberg,N. and Kay,R.M.
 TITLE High affinity human antibodies and human antibodies against digoxin
 JOURNAL Patent: US 6255458-A 393 03-JUL-2001;
 FEATURES Location/Qualifiers
 source 1. .3819
 /organism="unknown"
 /mol_type="unassigned DNA"
 ORIGIN

Query Match 100.0%; Score 420; DB 6; Length 3819;
 Best Local Similarity 100.0%; Pred. No. 3.6e-129;
 Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA 60
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Db      2434 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA 2493

Qy      61 GGTTCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120
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Db      2494 GGTTCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 2553

Qy      121 GACAGAGTCACCATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 180
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Db      2554 GACAGAGTCACCATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 2613

Qy      181 CAGCATAAACCAGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGT 240
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Db      2614 CAGCATAAACCAGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGT 2673

Qy      241 GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC 300
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Db      2674 GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC 2733

Qy      301 AGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTAC 360
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Db      2734 AGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTAC 2793

Qy      361 ACTTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 420
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Db      2794 ACTTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 2853
  
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RESULT 5

AR369997

LOCUS AR369997 3819 bp DNA linear PAT 12-SEP-2003

DEFINITION Sequence 243 from patent US 6300129.

ACCESSION AR369997

VERSION AR369997.1 GI:34606437

KEYWORDS .

SOURCE Unknown.
 ORGANISM Unknown.
 Unclassified.
 REFERENCE 1 (bases 1 to 3819)
 AUTHORS Lonberg,N. and Kay,R.M.
 TITLE Transgenic non-human animals for producing heterologous antibodies
 JOURNAL Patent: US 6300129-A 243 09-OCT-2001;
 FEATURES Location/Qualifiers
 source 1. .3819
 /organism="unknown"
 /mol_type="genomic DNA"

ORIGIN

Query Match 100.0%; Score 420; DB 6; Length 3819;
 Best Local Similarity 100.0%; Pred. No. 3.6e-129;
 Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA 60
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Db      2434 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA 2493

Qy      61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      2494 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 2553

Qy      121 GACAGAGTCACCATCACTTGTCGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      2554 GACAGAGTCACCATCACTTGTCGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 2613

Qy      181 CAGCATAAACCAGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGT 240
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      2614 CAGCATAAACCAGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGT 2673

Qy      241 GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC 300
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      2674 GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC 2733

Qy      301 AGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTAC 360
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      2734 AGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTAC 2793

Qy      361 ACTTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 420
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      2794 ACTTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 2853

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RESULT 6

BD096631

LOCUS BD096631 3819 bp DNA linear PAT 27-AUG-2002

DEFINITION Transgenic non-human animals capable of producing heterologous antibodies.

ACCESSION BD096631

VERSION BD096631.1 GI:22642219

KEYWORDS JP 2001527386-A/158.

SOURCE unidentified

ORGANISM unidentified

unclassified.

REFERENCE 1 (bases 1 to 3819)
AUTHORS Lonberg,N. and Kay,R.M.
TITLE Transgenic non-human animals capable of producing heterologous antibodies
JOURNAL Patent: JP 2001527386-A 158 25-DEC-2001;
GENPHARM INTERNATIONAL
COMMENT OS Unidentified
PN JP 2001527386-A/158
PD 25-DEC-2001
PF 01-DEC-1997 JP 1998525687
PR 02-DEC-1996 US 08/758417
PI NILS LONBERG,ROBERT M KAY
PC C12N5/00,C12N5/28,C12N5/24,C12N5/10,C07K16/00,A61K39/00 CC
Strandedness: Single;
CC Topology: Linear;
CC Transgenic non-human animals capable of
producing heterologous
CC antibodies
FH Key Location/Qualifiers
FT source 1. .3819
FT /organism='Unidentified'.

FEATURES Location/Qualifiers
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/organism="unidentified"
/mol_type="genomic DNA"
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ORIGIN

Query Match 100.0%; Score 420; DB 6; Length 3819;
Best Local Similarity 100.0%; Pred. No. 3.6e-129;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA 60
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Db      2434 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA 2493

Qy      61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120
      |||
Db      2494 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 2553

Qy      121 GACAGAGTCACCATCACTTGTCGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 180
      |||
Db      2554 GACAGAGTCACCATCACTTGTCGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 2613

Qy      181 CAGCATAAACCAGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGT 240
      |||
Db      2614 CAGCATAAACCAGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGT 2673

Qy      241 GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC 300
      |||
Db      2674 GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC 2733

Qy      301 AGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTAC 360
      |||
Db      2734 AGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTAC 2793

Qy      361 ACTTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 420

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